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SBA ECONOMIC REVIEW

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SMALL BUSINESS ADMINISTRATION

Office of Planning Research and Analysis

SMALL BUSINESS ADMINISTRATION 1953

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PREFACE

The SBA Economic Review is designed to give Agency distribution to studies, articles, statistics, and other timely information which may be of interest and help to the SBA central and field offices in planning, administration or evaluation of programs.

The featured materials are developed largely by SBA personnel. They also may include summaries of studies developed under contract for SBA and articles solicited from outside sources. Feature articles deal with sources of economic information, general economic topics, business trends, and program development. Particular attention is given to the presentation and analysis of national issues of relevance to small business.

The Office of Planning, Research and Analysis, which has primary responsibility for the SBA Economic Review, welcomes contributions and comments which will make the publication useful to SBA operations.

E. W. Sandberg
Assistant Administrator for
Planning, Research and Analysis

December 1972

S B A E C O N O M I C R E V I E W

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SMALL BUSINESS IN THE ECONOMY
1971 TO MID-YEAR 1972

By Alice K. Cullen

Overview

". . . the engine which drives enterprise is not thrift but profit."

------John Maynard Keynes

By almost all measures of small business change the economic environment was better for small concerns in 1971 than in 1970 and continued to improve during the first half of 1972. As gauged by general business indicators, factor costs moderated in their increase or declined, output and sales increased modestly, and the estimated total number of businesses and small concerns grew. However, profits probably are the best available index of small business performance and health. To the extent that small business profits can be measured, they too improved during the 1971--mid-year 1972 period.

Business Costs

During the first half of 1971 business incurred and passed on substantial cost increases. Although unemployment averaged almost 6 percent during that period, the cost of labor climbed as numerous union contracts were renegotiated and workers sought to maintain their real income as the purchasing power of the dollar declined. Interest rates trended upward after an early 1971 decline, the rate of increase in the Wholesale Price Index was substantially above the rise in the first two quarters of 1970, and the Consumer Price Index continued to rise although it proceeded at a slower pace than it had in the first half of 1970. Industrial production fell below the comparable level of 1970, and the value of manufacturing and trade sales improved moderately.

The New Economic Policy

The inauguration of the New Economic Policy in August 1971 paved the way to a slow but continuing improvement in business conditions through the first half of 1972. Although the new stabilization program did not place direct controls on interest costs, it put restraints on wages, rents and prices and provided direct incentives to increase business investment and consumer spending.[1] Under the umbrella of wage, rent and price controls small business was regarded as a passive element which has limited influence on wage and price determinations.

The November 11, 1971, guidelines of the Price Commission placed price controls on all firms but did not require so-called Tier III firms of less than $50 million sales to submit regular reports on prices, costs and profits or to pre-notify on price increases. Under the 1971 amendments to the Economic Stabilization Act additional concessions were made by the Cost of Living Council for small concerns.

Retail firms with annual sales of $100,000 or less were exempted from price controls. This group was estimated by the Council to represent 75 percent of the retail firms and about 15 percent of the total retail sales.[2] On May 1, 1972, companies with 60 or fewer employees were exempted from price and wage regulations with the exception of concerns in the health and construction industries where the impact of inflation continues to be serious.

In theory prices of these smallest firms were controlled indirectly by the competition in the marketplace which, in turn, was influenced by the activity of larger non-exempt businesses. This exemption was estimated to affect 5 million firms, $500 billion in annual sales and 19 million employees. By industry sectors the Council estimated the percent of sales covered by small firm exemptions as follows[3]:

Industry Sector	Sector Sales As A Percent Of Total Industry Sales	Percent of Sales Covered By Small Firm Exemption
Total Industry.....	100%	29%
Manufacturing.....	36	9
Non-Manufacturing.....	64	40
Wholesale/Retail Trade..	32	59
Utilities.....	12	11
Finance, Etc.	8	22
Service.....	6	61
Construction.....	5	NA
Mining.....	1	28

Interest Costs

After implementation of the New Economic Policy, costs of money declined generally for all business. In the early months of 1971 both long-term and short-term interest rates were relatively lower than during 1970 but the demand for funds increased. Gross national product rose at an annual rate of 14 percent in the first quarter and reduced expectations for a decline in the rate of price increases. Short-term and long-term interest rates showed an upturn from April through the first half of 1971.

Categorically, bank rates for short- and long-term loans and revolving credit loans of all sizes decreased after the announcement of the New Economic Policy, but differences in the rates of the largest and smallest size categories followed an expected course (Table 1). Rates on small loans, which can be equated substantially with small business borrowing costs, were consistent with trends during a period of declining interest rates. These rates, which initially were higher than rates for the larger loans, fell relatively less during the past year.[4]

TABLE 1

BANK RATES ON SHORT-TERM, LONG-TERM AND REVOLVING CREDIT BUSINESS LOANS

Short-Term Loans

Size of Loan ($000)	May 72	Feb. 72	Nov. 71	Aug. 71	May 71	Percent of Change Aug. 71-May 72	Index of Loan Rates May 72	Aug. 71	May 71
$ 1 -$ 9	7.07	7.08	7.51	7.68	7.45	- 7.9	133	122	130
10 - 99	6.53	6.44	7.05	7.27	6.94	- 10.2	123	116	121
100 -499	5.94	5.76	6.51	6.88	6.37	- 13.7	111	110	111
500 - 999	5.57	5.44	6.26	6.58	6.05	- 15.3	105	105	105
1,000 and over	5.33	5.31	5.93	6.27	5.75	- 15.0	100	100	100
Total	5.59	5.52	6.18	6.51	6.01	- 14.1	-	-	-

Long-Term Loans

$ 1 -$ 9	7.03	6.98	7.55	7.54	7.58	- 6.8	122	115	121
10 - 99	6.65	6.85	6.95	7.46	7.18	- 10.9	115	114	115
100 -499	6.26	6.19	6.79	7.10	6.90	- 11.8	108	109	110
500 -999	5.87	6.13	6.57	6.92	6.26	- 15.2	102	106	100
1,000 and over	5.78	5.44	6.35	6.54	6.26	- 11.6	100	100	100
Total	5.87	5.64	6.44	6.67	6.36	- 12.0	-	-	-

Revolving Credit

$ 1 -$ 9	6.52	6.60	7.24	7.40	6.86	- 11.9	117	118	120
10 - 99	6.28	6.16	6.74	7.08	6.54	- 11.3	113	113	115
100 -499	5.69	5.60	6.16	6.49	5.90	- 12.3	102	103	103
500 -999	5.60	5.31	6.01	6.36	5.85	- 11.9	101	101	102
1,000 and over	5.57	5.18	5.94	6.28	5.71	- 11.3	100	100	100
Total	5.59	5.24	5.98	6.31	5.75	- 11.4	-	-	-

Sources: Federal Reserve Statistical Release, December 27, 1971 and March 29, 1972.
and Federal Reserve Bulletin, August 1972, p. A 34

Labor Costs

Through all of 1971 and the first quarter of 1972 wage rates of labor continued a steady upward trend. After reaching a high of 125 percent of their 1967 base in the first quarter of 1972, the costs declined fractionally in the second quarter. For all business the 1971 annual average hourly gross earnings of nonagricultural production workers was $3.43 or 7 percent above the $3.22 annual average of 1970. By mid-year 1972 they reached an average of $3.59--6 percent above the 1971 6-month level.

Small Business Wage Rates. In areas of business which account for roughly three-fourths of the small concerns (construction, trade and services) the percent of the 1971 annual wage increases varied considerably. The 1971 increases in construction hourly earnings remained well above the average of nonagricultural wage gains but moderated in comparison with the increases in 1970. This slackening in construction labor cost increases probably resulted from the activity of the Construction Industry Stabilization Program which was established March 29, 1971, to review contract settlements.[5] For the year 1971 hourly earnings in the construction industries increased by 9 percent, from an annual average of $5.24 to $5.69. For the first half of 1972 they averaged 7 percent above their 1971 first half average.

For wholesale and retail trades the 1971 annual increase was 6 percent; for services it was 7 percent. In the first half of 1972 the trade average was 5 percent above the 1971 first half level, and the services average was 6 percent more for the same periods. The Cost of Living Council's exemption of numerous small firms from price and wage regulations and their decision to raise the basic exemption level for low wage earners from $1.60 to $1.90 an hour in March 1972 may have increased labor costs for some of these small businesses.[6]

Prices

In general, business curtailed total labor costs during the 18-month period of 1971 and 1972 by restricting employment. After a drop in the second quarter of 1971, productivity of labor began an irregular increase through the mid-year of 1972. Output per manhour for all persons in the private nonfarm economy, which had gained less than 1 percent from 1969 to 1970, increased by 3.7 percent from 1970 to 1971. During the first half of 1972 it rose again by 4.4 percent over the 1971 annual level.[7]

Nonlabor unit costs declined after the Economic Stabilization Program went into effect until the beginning of 1972. However, by the second quarter of 1972 these costs were rising at a higher rate than they had in the second quarter of 1971--5.9 percent as compared with 4.9 percent.[8]

The net effect of cost and productivity changes on prices before and after the implementation of the Economic Stabilization Program are shown in Table 2. By the second quarter of 1972 the rate of increase in the Consumer Price Index was less than its overall average in the pre- and post-stabilization period. However, the percentage rise in the Wholesale Price Index exceeded its post-stabilization average and reflected increasing relative prices in industrial commodities.

Some areas of predominantly small business have been affected by spiraling prices. The lumber and lumber products industries are small business areas which are involved significantly in the increased price level of industrial commodities. As a preponderant number of lumber producers are small, many were included under the general price and wage exemptions of May. However, soon after the close of the second quarter of 1972, the Cost of Living Council, to curb advancing lumber prices, directed the Forest Service to increase timber cutting and again put controls on 62,000 small lumber companies.[9]

TABLE 2

CHANGES IN CONSUMER AND WHOLESALE PRICE INDEXES, 1971-72

Index and Item	Percent of Change: 8 months prior to Phase 1, December 1970 to August 1971	10 months, Phases 1 and 11, August 1971 to June 1972	3 months ending— March 1972	3 months ending— June 1972
CONSUMER PRICE INDEX				
All items	3.8	2.7	3.6	2.2
Food	5.0	3.3	7.2	0
Commodities less food	2.9	1.7	2.4	2.7
Services	4.6	3.4	3.7	3.4
WHOLESALE PRICE INDEX				
All commodities	5.2	3.6	4.9	4.9
Farm products and processed foods and feeds	6.5	5.6	7.0	4.8
Industrial commodities	4.7	2.8	4.2	4.9
Selected Stage of Processing indexes:				
Crude materials except food	3.3	6.6	15.0	3.8
Intermediate materials except food	6.5	3.1	3.8	6.6
Producers' finished goods	3.7	2.0	4.9	3.4
Consumer goods except food	2.2	1.9	2.9	2.5
Consumer foods	6.8	3.8	3.8	2.7

Source: Monthly Labor Review, "The Anatomy of Price Change," September 1972, p. 51.

Numerous small retailers and services experienced and passed through cost increases which have been reflected in the behavior of the Consumer Price Index. Eating places felt the impact of wholesale price increases for meat, poultry, fish and other foodstuffs. Furniture store prices increased because demand for furnishings was boosted by residential building and labor and material costs rose at the producer and wholesale levels. Charges for medical services, motion pictures, amusements and recreational services increased through the second quarter of 1972. In other service areas of small business price rises were modest because of declines in consumer spending. These included a number of such services as laundry and drycleaning and beauty and barbershops.[10]

Economic Position of Small Business

Conclusions on the performance and position of small business in 1971 and in the first half of 1972 are deduced partially from data on the total economy or overall business performance. Other opinions are inferred from economic or statistical series which cover segments of small business. In many instances this information is gross because data are not adjusted for price changes and do not reflect net changes in the position of business for different periods of time. Nevertheless, from various sources on output, sales, income, profits and growth, small business trends can be determined with reasonable certainty.

Output

Total industrial output in 1971 was virtually the same as in 1970--106.8 percent of its 1967 base. For the same period the index of manufacturing capacity used, fell from 78.3 percent of the 1967 base to 75.0 percent. In durable goods output declined by about 2 percent; in nondurables it increased 3 percent. During the first six months of 1972 substantial gains were made in all aspects of industrial production. The total index and the durable and nondurable sections improved and a somewhat greater portion of total manufacturing capacity was used.

Large companies produce the major share of almost all manufacturing output, but small concerns are active competitors in selected areas. In durable goods the recent performance of industry groups in which small firms are particularly active varied considerably. Production of fabricated metal products and instruments declined. Increased output occurred in lumber and lumber products, clay, glass and stone products, furniture and miscellaneous manufactures (jewelry, toys, pencils, notions, etc.). In most small business areas of nondurable goods, 1971 output was about the same or less than it was in 1970. These industry groups included printing and publishing, leather goods and apparel. Production of textile mill products increased, however. All of these areas of manufacturing showed improvement during the first half of 1972.

Sales

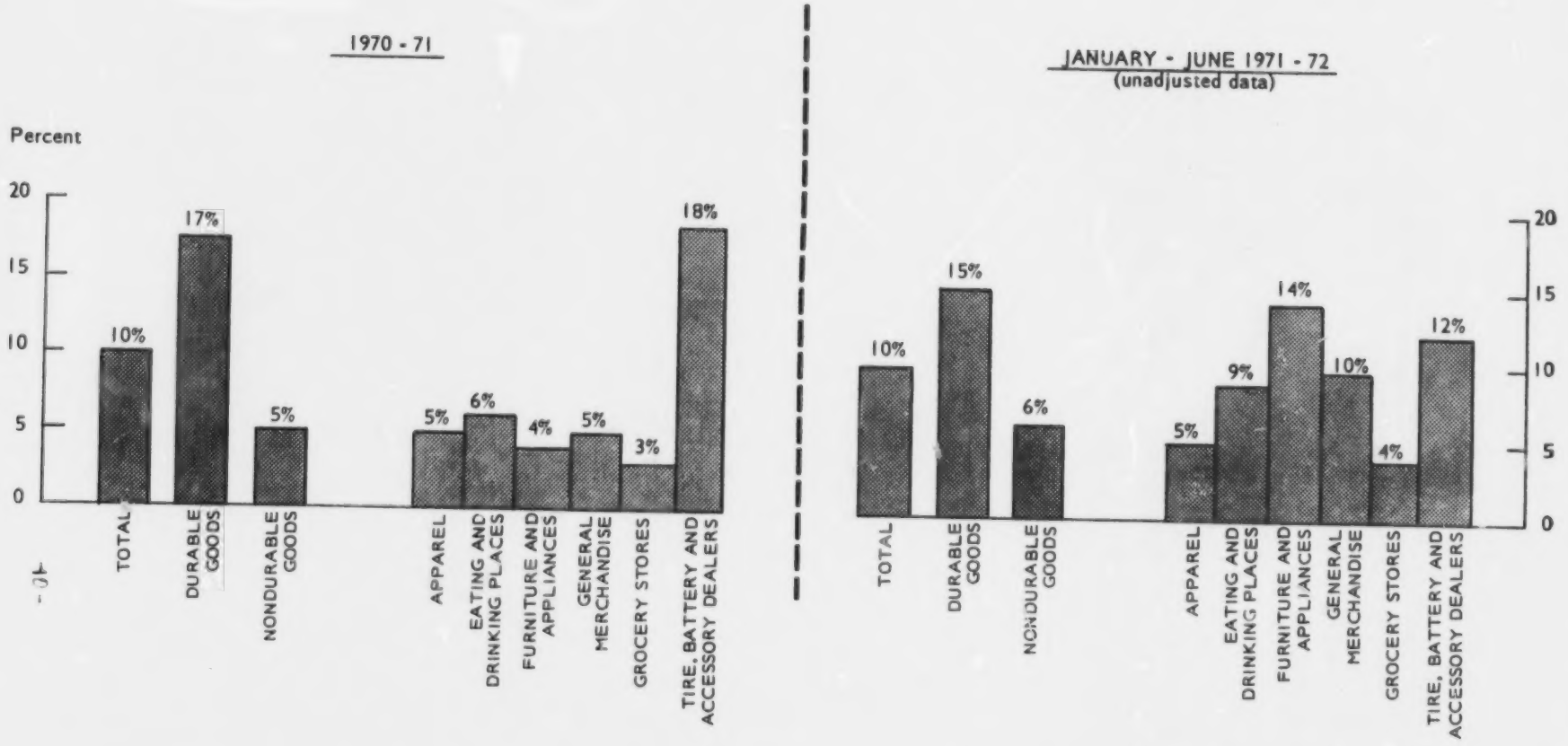
Merchant Wholesalers. Sales of merchant wholesalers, which are comprised substantially of receipts of small concerns, rose by 8 percent during 1971 from $247 billion to $267 billion. Following the housing trend, furniture and home furnishings were up 13 percent; hardware and plumbing and heating equipment, 11 percent; and lumber and construction materials, 20 percent.

When the first six months of 1971 are compared with the first six months of 1972, total merchant wholesaler sales increased 11 percent from $129 billion to $143 billion. All of the above small business sales areas which showed increases during 1971 continued still stronger in the first half of 1972 with the exception of furniture and home furnishings which had only a 4 percent rise. Jewelry sales also rose 13 percent in the first half of 1972.

Retailers. The retail sales record of small firms appears to have improved during the past year. Total retail sales in 1971 were estimated at $408.9 billion or 9 percent above 1970 level. Durable goods sales, which comprised almost one-third of the total, increased 15 percent and nondurable sales, 6 percent. The larger retail stores (11 or more firms) reported total and nondurable goods sales increases of 7-8 percent, and a 2 percent decline in the value of durable sales. Total sales of the smaller firms ro[illegible]

Chart 1

PERCENT OF CHANGE IN VALUE OF SALES OF SMALLER RETAIL STORES



Note: Smaller retail stores operate less than 11 retail outlets.

Source: Data derived from Bureau of the Census data on sales of retail stores.

almost 10 percent. Durable sales for smaller firms gained 17 percent while nondurable goods showed a 5 percent increase in sales (Chart 1).

General merchandise stores, where very large firms sell three-fourths or more of the total value, had 1971 sales increases of 13 percent for the larger stores and 5 percent for the smaller stores. In grocery stores, where the large concerns again supply over one-half of the sales, the increases were 5 percent and 3 percent for the large and small groups, respectively.

Percentage changes in the value of sales for stores with high small business participation also showed considerable variation by type of store and sometimes by size of concern. In durables, sales of small tire, battery and automobile accessory dealers increased 18 percent and sales of furniture and fixtures stores, 4 percent. Sales of larger firms for the same product groups increased 7 percent and 6 percent, respectively. In nondurables, apparel sales were up 5 percent for both groups. However, receipts of eating and drinking places rose 6 percent for smaller firms and declined 5 percent for larger firms. When compared with sales for the first half of 1971, the mid-year records of both size groups was better in 1972 and showed particular improvement in the durable goods category.

Government Procurement*

Total Federal Government contract awards to American business firms increased in Fiscal Year 1972 by $2,689 million to $43,840 million. The Department of Defense total rose from $31,063 million in Fiscal Year 1971 to $34,047 million with increases in the value of both its military and civil function purchases. However, for the first time since 1969 purchases of civilian agencies fell below the $10 billion mark. Their total, which excludes purchases of the Atomic Energy Commission, dropped from $10,088 million in FY 1971 to $9,793 million in FY 1972 (Table 3).

* This section on Government procurement was prepared by Curtis E. Anderson.

TABLE 3

DEPARTMENT OF DEFENSE AND CIVILIAN AGENCIES AWARDS TO SMALL BUSINESS CONCERNS, FISCAL YEAR 1972
(Millions of Dollars)

		Department of Defense				
		Military Functions	Civil Functions	DOD Total	All Civilian Agencies Total	Government Total
1972	Total Purchases	$33,007	$1,040	$34,047	$9,793*	$43,840
	Total Purchases from SB	5,754	374	6,128	2,552	8,680
	Percent to SB	17.4%	36.0%	18.0%	26.1%	19.8% (14.0% DOD)
	Total SB Set-Asides	1,625	127	1,752	639	2,391 (5.8% Civ)
	Percent SB Set-Asides to Total SB Awards	28.2%	33.9%	28.6%	25.0%	27.5%
1971	Total Purchases	30,208	$ 854	$31,063	$10,088*	41,151
	Total Purchases from SB	4,949	342	5,292	2,396	7,687
	Percent to SB	16.4%	40.1%	17.0%	23.8%	18.7% (12.9% DOD)
	Total SB Set-Asides	1,456	133	1,589	517	2,106 (5.8% Civ)
	Percent SB Set-Asides to Total SB Awards	29.4%	38.9%	30.0%	21.6%	24.7%

Note: Detail may not add to totals due to rounding.

*Total excludes Atomic Energy Commission

Sources: Military Prime Contract Awards and Subcontract Payments or Commitments, Office of the Secretary of Defense, OASD (Comptroller), Directorate for Information

Prime Contract Awards to Business Firms, to Small Business Firms, and Set-Asides for Small Business Firms, Office of the Secretary of Defense, OASD (Comptroller), Directorate for Information.

Procurement by Civilian Executive Agencies, General Services Administration, Office of Finance.

Small Business Share. In Fiscal Years 1971 and 1972 small firms were awarded 69 percent of the total number of contracts placed with business. But the small business share of total Federal Government procurement dollars rose from 18.7 percent in FY 1971 to 19.8 percent in FY 1972. Of these totals the Department of Defense purchases accounted for 14 percent in FY 1972 and 12.9 percent in FY 1971. Civilian agency purchases were 5.8 percent of the small business share in both years, but small business had a larger part of the smaller civilian agency pie in FY 1972.

For the second year small business also received almost 35 percent of total DOD commitments for subcontract work. A total of 766 large contractors reporting to DOD awarded small firms $3,441 million in subcontracts as compared with $3,292 million in the previous fiscal year. The small business share of DOD subcontracting for FY 1972 still was far below the high dollar value for subcontracts to small firms in 1967. That year small concerns received $6,697 million or 43 percent of the $15,472 million committed to all DOD subcontractors. The decline in recent years is attributed largely to the technological complexities involved in subcontract work for military and space items.

Income and Profits

Unincorporated Businesses. Income of unincorporated businesses reflects changes in the financial position of proprietorships and partnerships which generally are members of the small business community. After a decline of 1 percent in 1970, the total income of unincorporated businesses rose by more than 5 percent in 1971 (Table 4). By industries the the 1971 increases were most significant for finance, insurance and real estate, transportation, contract construction, and services. Total manufacturing income was about the same in the two years but income from nondurable goods declined by almost 3 percent and from durables increased by about 2 percent.

From 1969-71 the proportion of total income of these concerns in transportation and services increased. After drops in 1970, the percentages represented by construction and finance, insurance and real estate also rose.

TABLE 4

INCOME OF UNINCORPORATED ENTERPRISES BY INDUSTRY DIVISION
(Millions of Dollars)

	1969	1970	1971	Percent of Change 1969-70	Percent of Change 1970-71	Percent of Total 1969	Percent of Total 1970	Percent of Total 1971
All Nonfarm Industries, Total.....	51,228	50,660	53,398	-1.1	5.4	100.0	100.0	100.0
Agriculture, Forestry, and Fisheries (except farms).....	781	718	722	-8.1	0.6	1.5	1.4	1.4
Mining.....	37	103	40	178.4	-61.2	*	0.2	*
Contract Construction.....	5,157	4,962	5,293	-3.8	6.7	10.1	9.8	9.9
Manufacturing.....	1,849	1,652	1,651	-10.7	-0.1	3.6	3.3	3.1
Nondurable goods.....	670	640	623	-4.5	-2.7	1.3	1.3	1.2
Durable goods.....	1,179	1,012	1,028	-14.2	1.6	2.3	2.0	1.9
Transportation.....	1,219	1,237	1,423	1.5	15.0	2.4	2.4	2.7
Communication.....	15	39	39	160.0	0.0	*	*	*
Electric, Gas, and Sanitary Services.....	104	99	99	-4.8	0.0	0.2	0.2	0.2
Wholesale and Retail Trade.....	14,101	14,032	14,467	-0.5	3.1	27.5	27.7	27.1
Wholesale Trade.....	3,355	3,359	3,402	0.1	1.3	6.5	6.6	6.4
Retail Trade.....	10,746	10,673	11,065	-0.7	3.4	21.0	21.1	20.7
Finance, Insurance, and Real Estate.....	4,055	3,172	3,771	-21.8	18.9	7.9	6.3	7.1
Services.....	23,910	24,646	25,893	3.1	5.1	46.7	48.6	48.5

Source: Survey of Current Business, National Income and Product Tables, July, 1972, p. 41.

Small Manufacturing Corporations. In the corporate sector of business the only information currently available on the financial position of small business is in manufacturing. As the 1970 income of unincorporated manufacturers (Table 4) declined 11 percent, the pretax profits of the smallest manufacturing corporations (under $1 million assets) dropped 38 percent. While the unincorporated manufacturers had a fractional decline in their 1971 income of 0.1 percent, the smallest corporations made a scant gain in pretax profits of 0.4 percent. Direct comparison of the degree of change in the unincorporated manufacturing incomes and corporate manufacturing pretax profits is not meaningful because the definitions of income and profits for tax purposes embody certain basic inconsistencies.[11] However, significantly, both series of data show the financial position of small manufacturers eroded during 1970 and 1971.

When compared with their 1967 base (Chart 2), the before-tax earnings of the smallest manufacturers in 1970 and 1971 were barely more than two-thirds of par. On an after-tax basis (Chart 3), their 1970 and 1971 indexes fell to 56 percent and 54 percent, respectively, of the 1967 base. The larger corporations ($1 million assets and over) also had a sharp decrease in before- and after-tax profits during 1970 but the degree of decline was not as severe as that of the smaller manufacturers. At no time since 1967 has their index fallen below the base value and improvement in the profit position of the largest asset group began during 1971 well before significant change occurred for the smaller firms.

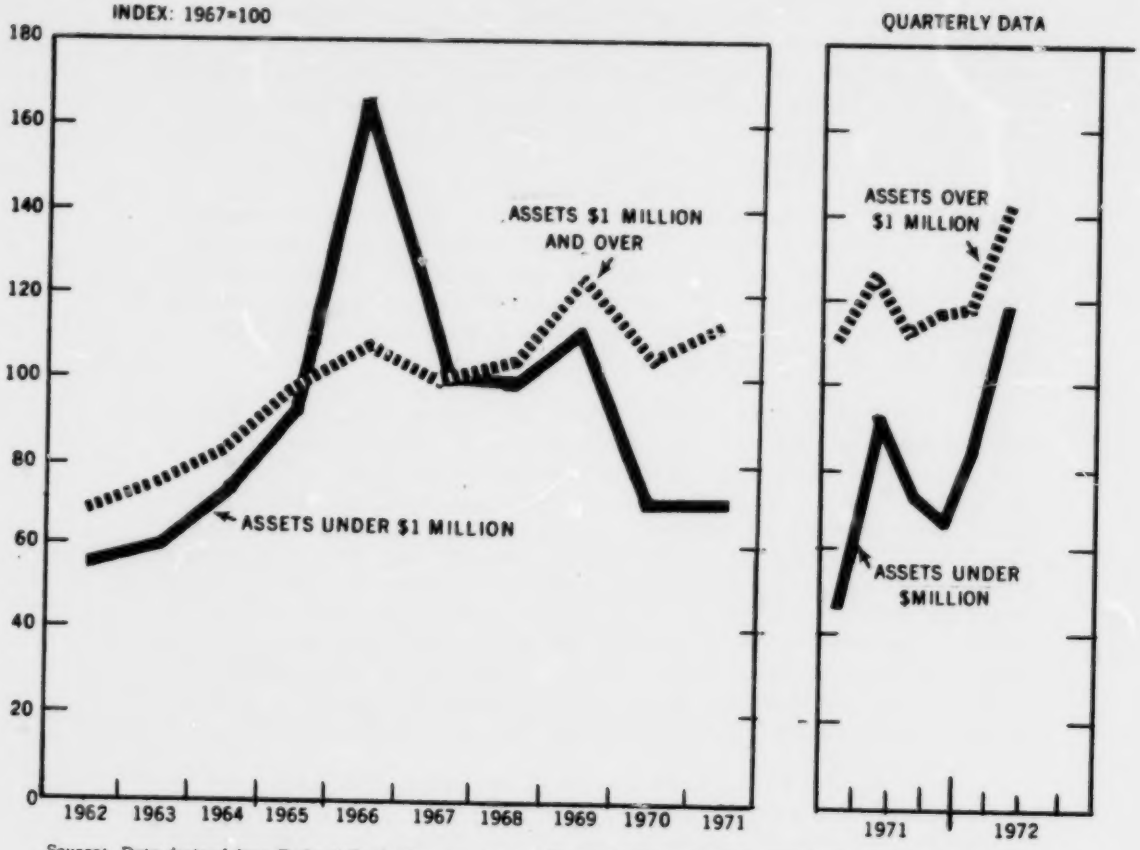
In the first half of 1972 the indexes of pretax and post-tax earnings for both asset groups improved significantly. The index of earnings in all instances were above their comparable 1971 levels in both quarters of 1972. In the second quarter of 1972 the indexes for the smaller group exceed their 1967 base for the first time since 1969.

The after-tax profits of the smallest asset manufacturing corporations are compared with those of other selected larger asset groups in Table 5. Profits of the smallest corporations seem to have declined far more rapidly than those of larger asset groups after the downturn of the business cycle in November 1969. In 1970 their after-tax profits fell almost 45 percent as compared with declines of

EARNINGS BEFORE TAXES

Manufacturing Corporations
By Asset Size

Chart 2

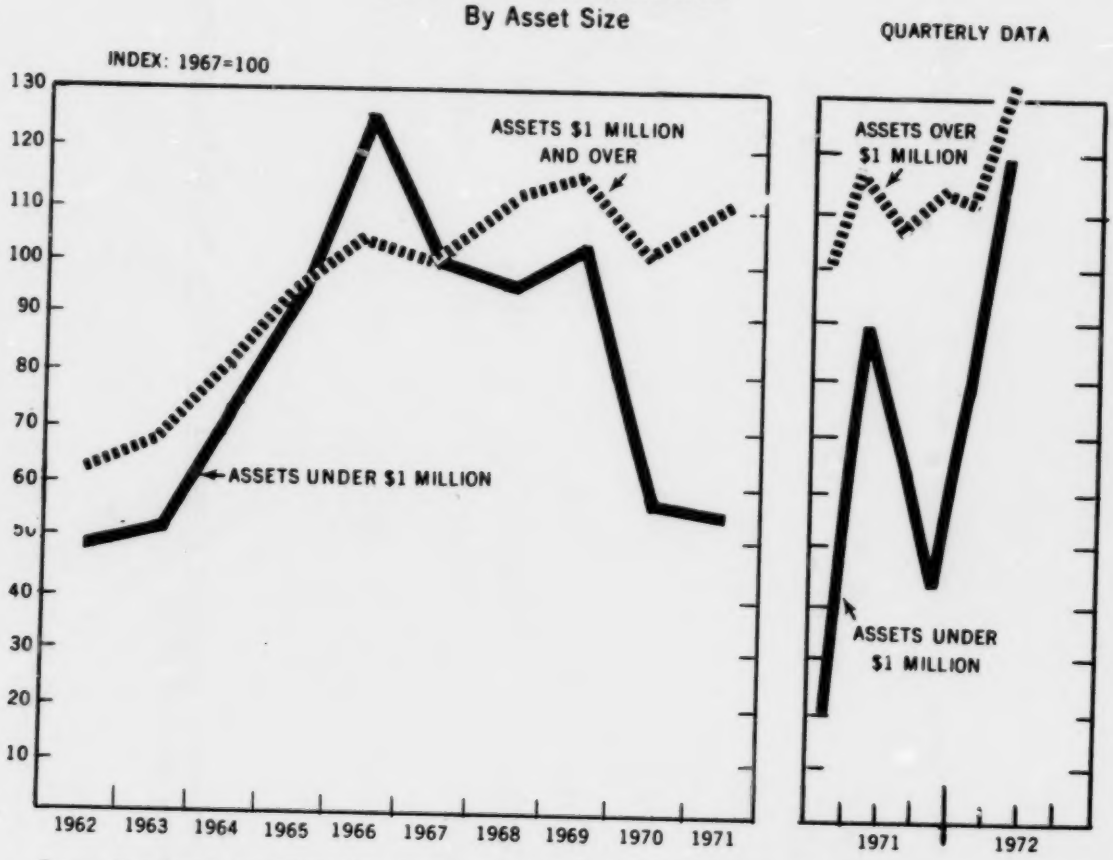


Source: Data derived from Federal Trade Commission and Securities and Exchange Commission quarterly financial statistics for manufacturing corporations.

Chart 3

EARNINGS AFTER TAXES

Manufacturing Corporations
By Asset Size



Source: Data derived from Federal Trade Commission and Securities and Exchange Commission quarterly financial statistics for manufacturing corporations.

TABLE 5

PROFITS AFTER TAXES OF ALL MANUFACTURING CORPORATIONS
BY ASSET SIZE
FOR 1969, 1970, 1971 AND FIRST HALVES 1971 AND 1972
(Millions of Dollars)

	All Asset Sizes	Assets $1 Mil. & Up	Assets Under $1 Mil.	Assets $1 - $10 Mil.	Assets $10 - $50 Mil.	Assets Over $50 Mil.
1969	33,248	31,387	1,862	2,401	2,211	26,775
1970	28,572	27,541	1,028	1,784	1,647	24,110
1971	31,029	30,042	988	2,015	1,737	26,289
Percent of Change 1969-1970	-14.1	-12.3	-44.8	-25.7	-25.5	-10.0
Percent of Change 1970-1971	+8.6	+9.1	-3.9	+12.9	+5.5	+9.0
First Half 1971	15,520	15,018	503	878	853	13,287
First Half 1972	17,567	16,660	906	1,288	1,041	14,331
Percent of Change First Half 1971- First Half 1972	+13.2	+10.9	+80.1	+46.7	+22.0	+7.9

Source: Federal Trade Commission, Quarterly Financial Report for Manufacturing Corporations, First Quarter 1970 and 1971 and Second Quarter 1972.

10-26 percent for corporations in the $1 million to over $50 million asset sizes. The post-tax profit position of the smallest asset group also continued to decline after the upturn of the business cycle in December 1970, for their 1971 profits dropped an additional 4 percent. The 1971 profits of all larger asset sizes increased. In the first half of 1972 the profit rise for the under $1 million asset group was sharp, 80 percent above the level for the first half of 1971. The after-tax profits of all larger corporations increased but at more modest rates.

The ratio of after-tax profits to sales for the smallest asset group increased from 1.6 cents on the dollar in the January-June period of 1971 to 2.5 cents during the first half of 1972 (Table 6). In all cases the return on the sales dollar was better for the larger counterparts. In the comparable period of 1971 it ranged from 2.2-4.9 cents and for 1972, from 2.7-4.8 cents.

In the under $5 million asset group the percent of after-tax profits to sales also is available for corporate manufacturers by durable and nondurable goods categories. The profit-sales ratio improved for both types of manufacturers during the first six months of 1972 but manufacturers of durable goods showed a greater degree of improvement.

Growth of Business

In 1971 there were an estimated 8.4 million total businesses and 8.0 small businesses in the United States. The 1971 change in the structure of business will not be known for a considerable period of time but the relative standing of business by industry divisions probably will be very similar to the following known distribution: Services, 33 percent; retail trade, 25 percent; finance, insurance and real estate 14 percent; construction, 10 percent; manufacturing and wholesale, 5 percent each; and all other (including agriculture (except farms), mining and transportation, communication and public utilities), 8 percent.

TABLE 6

SALES AND PROFITS AFTER TAXES OF ALL MANUFACTURING CORPORATIONS
BY ASSET SIZE
FOR 1969, 1970, 1971 AND FIRST HALVES 1971 AND 1972
(Millions of Dollars)

	All Asset Sizes	Assets $1 Mil. & Up	Assets Under $1 Mil.	Assets $1 - $10 Mil.	Assets $10 - $50 Mil.	Assets Over $50 Mil.
1969	694,584	621,705	72,878	84,121	61,425	476,159
1970	708,810	641,731	67,079	82,433	60,161	499,140
1971	750,832	683,855	66,978	81,996	59,415	542,444
First Half 1971	368,910	336,583	32,327	39,245	28,841	268,497
First Half 1972	411,040	374,941	36,100	47,248	32,158	295,535
Profit per $ of Sales in Cents						
1969	4.8	5.0	2.6	2.9	3.6	5.6
1970	4.0	4.3	1.5	2.2	2.7	4.8
1971	4.1	4.4	1.5	2.5	2.9	4.8
First Half 1971	4.2	4.5	1.6	2.2	3.0	4.9
First Half 1972	4.3	4.4	2.5	2.7	3.2	4.8

Note: Detail may not add to total due to rounding.

Source: Federal Trade Commission, Quarterly Financial Report for Manufacturing Corporations, First Quarter 1970 and 1971 and Second Quarter 1972.

Incorporations

New business incorporations increased from 264,209 in 1970 to 287,547 in 1971, a gain of 9 percent. They exceeded the previous high in 1969 of 274,267 by almost 5 percent. These gains occurred in all months of 1971 except January and February and in every month of the first half of 1972 (Chart 4).

By Small Business Administration Regions new incorporations increased for the entire period (Table 7). During 1971 the major relative increases in incorporations took place in Region I (Boston), Region VIII (Denver), Region IX (San Francisco) and Region X (Seattle). In the first half of 1972 Region VII (Kansas City) was added to this list but Region X (San Francisco) dropped in its relative standing.

Self-Employed Workers

The self-employed showed a net gain in their average annual number of about 92,000 or 2 percent. The total number rose from roughly 5.2 million to 5.3 million. Intermittent growth continued through the first half of 1972. The return of more than a million veterans in each of the past two years may have added an unknown number of new proprietors to the ranks of this group.

Business Failures

Business failures decreased 4 percent in 1971 from 10,748 in 1970 to 10,326.[12] If the January-June periods of 1971 and 1972 are compared the change was even greater--a decline of 11 percent (Chart 5). The number of failures per 10,000 firms averaged 43.8 for 1970 and 41.7 in 1971. During the first six months of 1972 they ranged from a high in March of 41.2 to a June low of 34.2 but in each month were less than their comparable number for the previous year (Chart 6).

When the entire 18-month period, 1971-June 1972, is considered, relative increases in business failures are found in four of the Small Business Administration Regions. These are Region II (New York), Region VI (Dallas), Region VII (Kansas City), and Region VIII (Denver) (Table 8).

TABLE 7

NEW INCORPORATIONS: NUMBER BY SBA REGIONS, 1970, 1971 AND FIRST HALVES OF 1971 AND 1972

SBA Regions	1971	1970	Percentage Distribution 1971	Percentage Distribution 1970	Index of Change in Relative Position 1970 - 71	6 Months 1972	6 Months 1971	Percentage Distribution 6 Months 1972	Percentage Distribution 6 Months 1971	Index of Change in Relative Position First Half 1971 - 72
United States, Total	287,547[R]	264,209	100.0	100.0	100	162,125	143,376	100.0	100.0	100
Region I	17,248	15,059	6.0	5.7	105	10,005	8,367	6.2	5.8	107
Region II	60,069	55,300	20.9	20.9	100	34,524	30,698	21.3	21.4	100
Region III	31,995	30,600	11.1	11.6	96	17,602	16,407	10.9	11.5	95
Region IV	46,907	42,444	16.3	16.1	101	27,028	23,930	16.7	16.7	100
Region V	44,662	41,780	15.5	15.8	98	25,228	22,343	15.6	15.6	100
Region VI	25,105	23,152	8.7	8.8	99	13,792	12,108	8.5	8.4	101
Region VII	11,924	11,469	4.1	4.3	95	7,048	5,827	4.3	4.1	105
Region VIII	9,379	8,224	3.3	3.1	106	5,632	4,600	3.4	3.2	106
Region IX	31,198	28,342	10.9	10.7	102	16,191	14,736	10.0	10.3	97
Region X	9,060	7,839	3.2	3.0	107	5,075	4,360	3.1	3.0	103

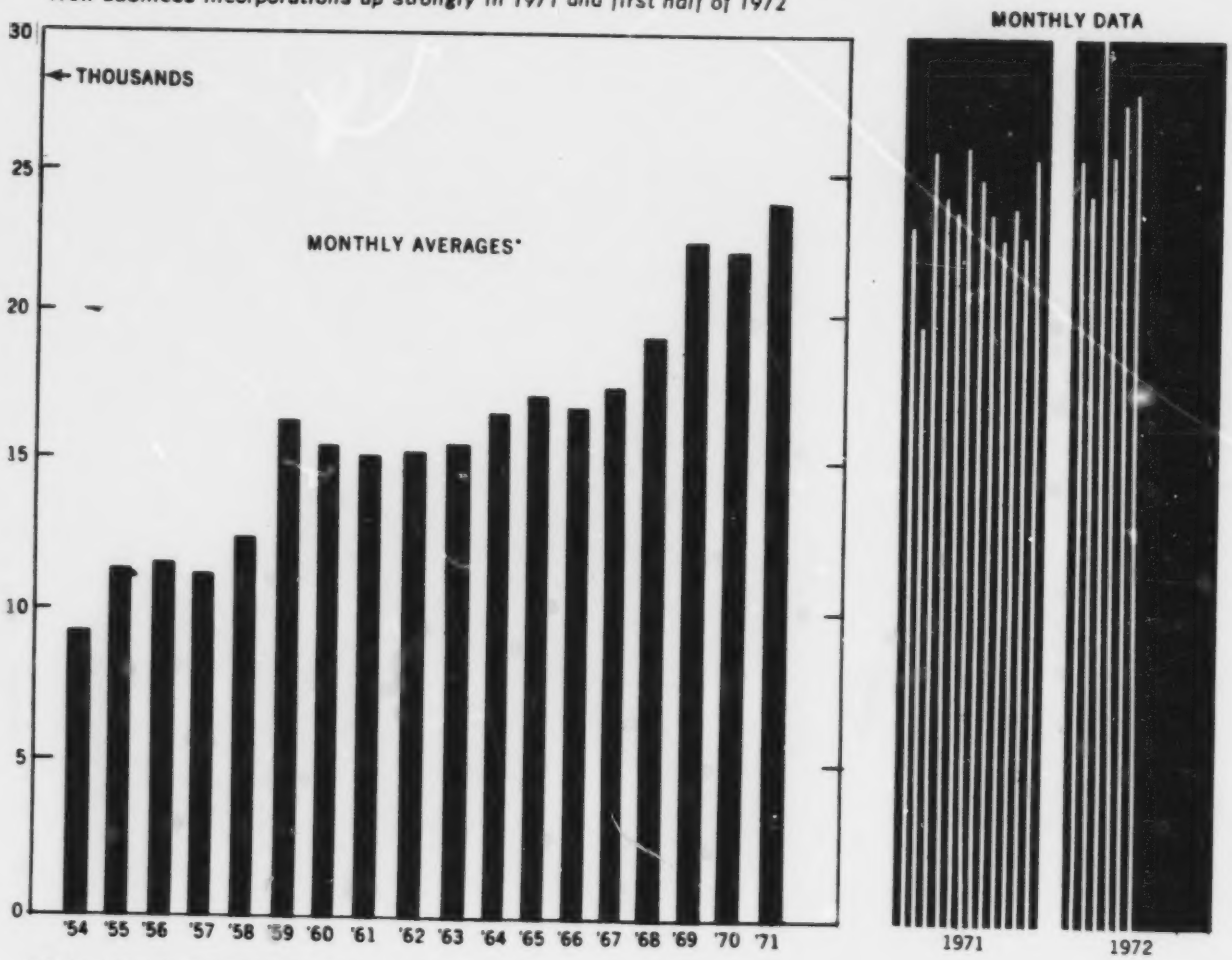
R - Revised

Source: Dun & Bradstreet, Inc.

Chart 4

NEW BUSINESS INCORPORATIONS

New business incorporations up strongly in 1971 and first half of 1972



* Series includes data for Hawaii, Alaska, and the District of Columbia beginning with 1958, 1960, and 1963 respectively

Not seasonally adjusted.

Source: Dun & Bradstreet, Inc.

TABLE 8

BUSINESS FAILURES: NUMBER BY SBA REGIONS 1970, 1971 AND FIRST HALVES OF 1971 AND 1972

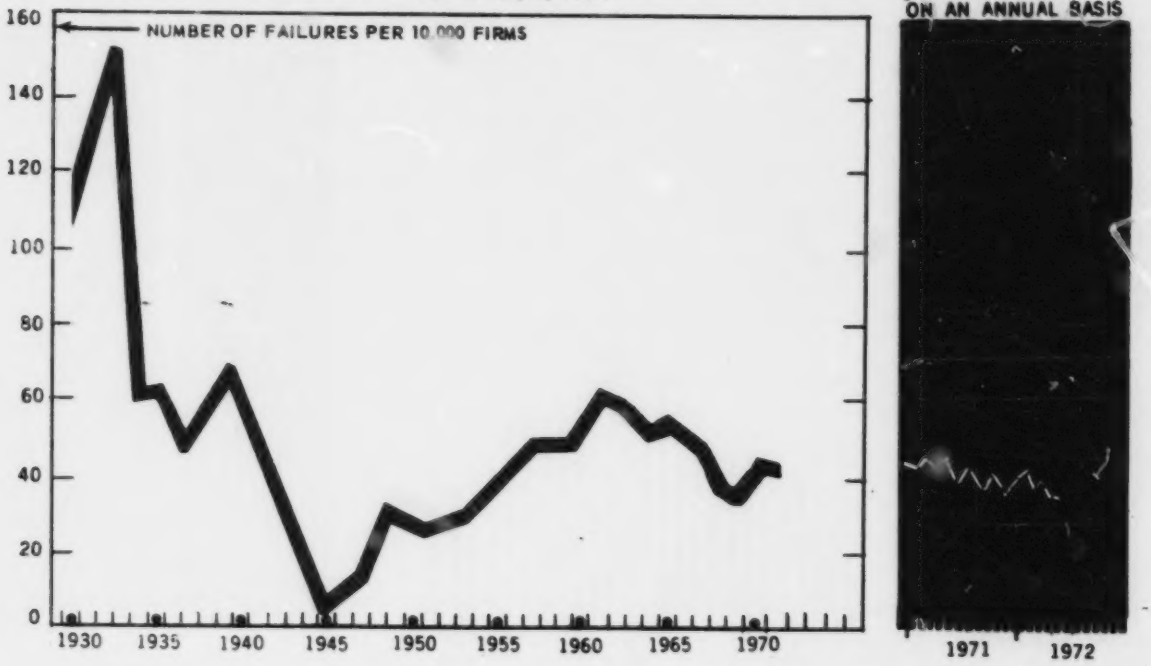
SBA Regions	1971	1970	Percentage Distribution 1971	Percentage Distribution 1970	Index of Change in Relative Position 1970 - 71	6 Months 1972	6 Months 1971	Percentage Distribution 6 Months 1972	Percentage Distribution 6 Months 1971	Index of Change in Relative Position First Half 1971 - 72
United States, Total	10,326	10,748	100.0	100.0	100	5,010	5,643	100.0	100.0	100
Region I	675	684	6.5	6.4	102	283	378	5.6	6.7	84
Region II	1,912	1,892	18.5	17.6	105	1,137	1,036	22.7	18.4	123
Region III	786	843	7.6	7.8	97	356	412	7.1	7.3	97
Region IV	876	939	8.5	8.7	98	468	496	9.3	8.8	106
Region V	2,136	2,292	20.7	21.3	97	918	1,245	18.3	22.1	83
Region VI	998	901	9.7	8.4	115	601	538	12.0	9.5	126
Region VII	353	257	3.4	2.4	142	184	156	3.7	2.8	132
Region VIII	119	119	1.2	1.1	109	76	58	1.5	1.0	150
Region IX	1,900	2,306	18.4	21.5	86	779	950	15.6	16.8	93
Region X	571	515	5.5	4.8	115	208	374	4.2	6.6	64

Source: Dun & Bradstreet, Inc.

Chart 6

RATE OF BUSINESS FAILURES

Business failures down in 1971 and first half of 1972



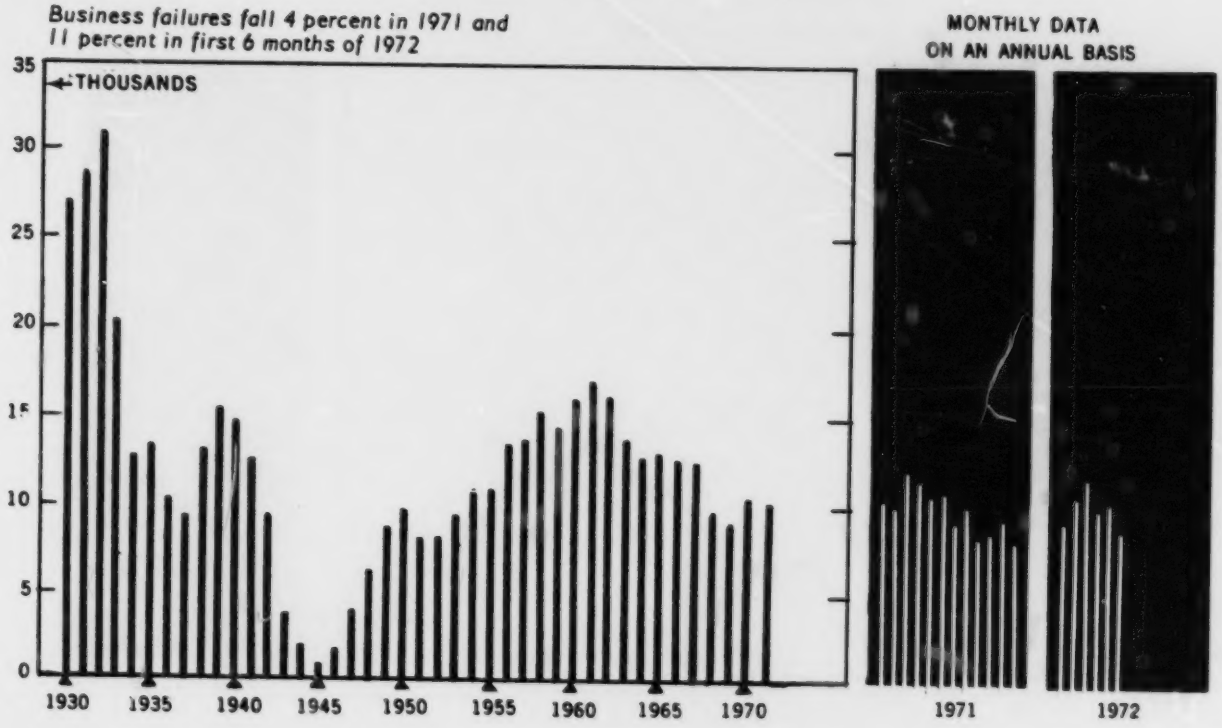
*Adjusted index.

Source: Dun & Bradstreet, Inc.

Chart 5

NUMBER OF BUSINESS FAILURES

Business failures fall 4 percent in 1971 and 11 percent in first 6 months of 1972



Source: Dun & Bradstreet, Inc.

The largest proportion of failures were in retail trade, manufacturing and construction for both 1971 and the first half of 1972. Services which are the most numerous of all types of total business are not fully represented in the universe from which the business failures are derived. Probably for this reason alone they registered a lower proportion of failures than other less numerous types of business (Table 9).

TABLE 9

BUSINESS FAILURES: NUMBER BY INDUSTRY DIVISIONS, 1970, 1971 AND FIRST HALVES OF 1971 AND 1972

Industry Division	1971	1970	Percentage Distribution 1971	Percentage Distribution 1970	Index of Change in Relative Position 1970 - 71	6 Months 1972	6 Months 1971	Percentage Distribution 6 Months 1972	Percentage Distribution 6 Months 1971	Index of Change in Relative Position First Half 1971 - 72
United States, Total	10,326	10,748	100.0	100.0	100	5,010	5,643	100.0	100.0	100
Mining and Manufacturing	1,932	2,035	18.7	18.9	99	841	1,070	16.8	19.0	88
Wholesale Trade	957	984	9.2	9.1	101	533	508	10.6	9.0	118
Retail Trade	4,428	4,650	42.9	43.3	99	2,266	2,420	45.2	42.9	105
Construction	1,545	1,687	15.0	15.7	96	705	846	14.1	15.0	94
Commercial	1,464	1,392	14.2	13.0	109	665	799	13.3	14.1	94

Source: Dun & Bradstreet, Inc.

Footnotes

1 SBA Economic Review, Fall 1971, p. 9 and SBA Economic Review, Annual Issue 1972, pp. 29-34.
(To directly promote business investment and consumer spending the New Economic Policy called for restoration of an investment tax credit, repeal of the 7 percent excise tax on automobiles, and the speedup of the personal income tax exemption scheduled for January 1, 1973 to January 1, 1972.)

2 Cost of Living Council, Economic Stabilization Program Quarterly Report, Covering the Period January 1 Through March 31, 1972, (Washington, D.C.: U.S. Government Printing Office), p. 98.

3 Cost of Living Council, Economic Stabilization Program Quarterly Report, Covering the Period April 1 Through June 30, 1972, (Washington, D.C.: U.S. Government Printing Office), pp. 11 and 25.

4 Federal Reserve Bulletin, "Bank Rates on Business Loans--Revised Series", June 1971, pp. 468-75. (As banks often do not tie their charges on smaller loans to the prime rate, the small loan rates tend to change less frequently than the prime rate and to deviate from the prime rate to a greater extent than the rates on larger loans.)

5 Cost of Living Council, op. cit. p. 29.

6 Cost of Living Council, News Release, May 4, 1972. (In July wages of less than $2.75 were decontrolled.)

7 Information obtained by telephone from the Bureau of Labor Statistics.

8 Monthly Labor Review, "The Anatomy of Price Change", September 1972, pp. 50-54.

9 Ibid.

10 Ibid.

11 Income of unincorporated businesses include wages and salaries of proprietors and family workers and the cost of proprietors' equity and represent income prior to deduction of the individual income tax.

12 Business failures are defined by Dun & Bradstreet, Inc. as firms which cease operation following assignment or bankruptcy or otherwise close with loss to creditors. They do not include firms which discontinue operations for other such reasons as insufficient earnings or retirement or death of owner.

SURVIVAL AND GROWTH - TWO CONFERENCES FOR THE SMALL RESEARCH & DEVELOPMENT FIRM

By Andrew A. Canellas

Introduction

In mid-June 1972, a conference was held in Washington, D. C., to promote a dialogue between small research and development firms and the Federal Government. For three days, small R & D firms had the attentive ears of their Federal counterparts. The conference provided a forum, the first of its kind, at which small R & D firms could bring to the attention of interested Federal personnel their specific problems. The general theme of the conference, focused on the major issues facing the small R & D firm, was Survival and Growth. It was soon evident that the discussion among the participants matched the provocative conference title.

As a result of the intense interest shown in the Washington forum, a similar conference was held in Los Angeles, California, in late September on the problems of the small R & D firms on the West Coast. California firms had suffered the most drastic cutbacks in aerospace and defense procurement during the last few years. While California continues to be the leading R & D support State by a wide margin, its share of the Federal R & D total has dropped dramatically.

A total of over 400 people participated in the conferences, including representatives of small R & D firms, Federal agencies, nonprofit organizations, universities and State and local governments. Following is an account of why and how these conferences came about and what they accomplished.

Background

For some time, the SBA has been concerned with the small share of Federal R & D spending going to small business. In procurement areas other than R & D, small firms have compiled a much more favorable record. For example, in Fiscal Year 1972, small firms only received 4.9 percent ($256 million) of the Department of Defense's prime R & D business awards but managed to obtain 17.4 percent ($5,753 million) of all other DOD procurement.

A similar situation, though not to the same degree, prevailed in other major Federal procurement agencies.

In the Fall of 1968, the House Select Committee on Small Business, became particularly concerned about the plight of the small R & D firm. At that time, small firms were receiving 3.4 percent of DOD prime R & D awards compared to 18.4 percent of total DOD procurement. In percentage terms, DOD R & D awards to small firms were at their lowest level in seven years. In response to the Congressional interest, the Interagency Committee on Research and Development, representing the major Federal procurement agencies, was created to assist SBA in studying how to increase the small business share of Federal R & D procurement.

The Committee's findings, which pointed to a number of barriers facing small business, reinforced the Agency's prior knowledge in this area. The major problems included: Federal contractor bias favoring large firms, the untimeliness of using the Commerce Business Daily, Federal payment problems, difficulties in predetermining R & D costs, dependence on local geographic environment, and the greater risks inherent in Federal work.

Data showed that the Nation's total R & D activity was highly concentrated in a small number of industrial firms. As recent as 1970, about 20 percent of all industrial R & D was funded by the four largest R & D firms, and over 80 percent of industrial R & D was accounted for by only 100 companies. Surprisingly, this lopsided concentration was even higher in Federally-funded R & D activity where four companies accounted for one-third of all Federal work performed by industry.

Basic Changes in National Posture

It was found that R & D activity had undergone basic changes during the last few years. Real annual growth of the Nation's total R & D spending had declined from an average of 11 percent in the late 1950's to less than half of one percent during the 1967-71 period. In recent years, the rate of R & D growth in the United States had become lower than that of Canada, Japan or West Germany.

Federal outlays for R & D, as a share of total Federal spending, declined from a high of 12.6 percent in 1965 to 8 percent in 1971. In the early 1960's, Federal R & D spending

accounted for about 65 percent of the National total. By 1971, it had dropped below 55 percent. In dollar terms, Federal R & D spending peaked in 1967 at $17.1 billion, compared to an estimated 1971 level of $16.2 billion. When the formerly predominant Federal support of industrial R & D leveled off in the mid-sixties, many firms gradually shifted from space and defense work into R & D associated with new or improved civilian products.

Facing a reduced Federal defense market, competition became keener than ever for R & D firms of all sizes, but especially for the smaller firms.

National Concern Was Justified

The plight of the small R & D firm could not be ignored, and for good reason. There was ample evidence that small R & D firms played a key role in generating invention and innovation. Studies on the sources of invention and innovation were consistent in pointing out that independent inventors and small R & D firms were responsible for a high percentage of the important inventions and innovations of this century. There was no doubt that small firms contribute more to technological change than their relatively small investment in R & D would suggest.[1] The importance of technological change to economic growth was well established. For purely domestic reasons, therefore, the small R & D firm was important and must be kept viable.

However, the Nation's concern for the small R & D firm was not confined to domestic considerations. A Nation's technological change, or rate of innovation, strongly influences its position in international trade and this is soon reflected in its international balance of payments. The U. S. economy was losing its historic international trade surplus thereby worsening the already unacceptable balance of payments position.

In March of 1972, the Administration's concern was explicitly recognized in the President's Message to Congress on Science and Technology in which he called for a major new national effort. Included in the President's recommendations were the need to expand the availability of venture capital to small R & D firms, and to set up new programs in 1973 in the National Science Foundation and the National Bureau of Standards to stimulate the civilian application of R & D.

Approval and Preparation for Conferences

During this particular setting, Dr. Samuel Cardon, an officer of a small R & D firm, suggested to SBA that a Washington conference was needed to call attention to the problems facing the small technologically based firms. The idea was presented to the Interagency Committee on Research & Development, the group that for two years had been looking into the problems of the small R & D firm. The Committee gave its approval, thus assuring the conference of the support of eight Federal agencies.

A grant, funded by the Department of Commerce, National Science Foundation and the SBA, was awarded to the Private Enterprise Center of the American University to administer a Washington conference. Supporting the conference were the other members of the Interagency Committee--Atomic Energy Commission, Department of Defense, Department of Health, Education and Welfare, Department of Transportation, and the National Aeronautics and Space Administration.

A steering committee, representing small R & D firms, the sponsoring Federal agencies, and several universities developed the conference agenda and selected the speakers. Using bidders' lists from the major Federal R & D purchasing agencies, a mailing list of about 9,000 firms was compiled. The first conference was held in Washington, D. C., on June 12, 13 and 14, 1972.

Due to the excellent response at the Washington conference, a repeat performance was scheduled for the West Coast. The second conference was handled directly by Dr. Sam Cardon through General Technical Services, Inc., operating under a contract funded by NASA, the Department of Commerce and SBA. A similar steering committee guided the second conference which took place in Los Angeles on September 27, 28, and 29, 1972.

Representing the SBA as major speakers or panel members at the conferences were Administrator Thomas Kleppe, Deputy Administrator Anthony Chase, Associate Administrator Marshall Parker, Deputy Associate Administrator Clyde Bothmer, and Assistant Administrator Emanuel Sandberg.

Panel Topics Covered

The conferences represented an open forum whereby selected panels focused on the critical issues facing the R & D community. The panels, comprised of high level representatives from Federal and State agencies, officers from small R & D firms,

and others knowledgeable in R & D matters, provided the participants with lively topics. The topics included a look at the current and future Federal market, problems of selling R & D to the Federal Government, meeting the research demands in non-Federal fields, managing financial growth, strengthening the small R & D firm, the potential of technology transfer, the new opportunities for the small R & D firm and the small R & D firm in today's environment.

Federal Government Markets

Spokesmen for the major Federal purchasing agencies informed the participants in which programs their respective agency's R & D opportunities exist. Whenever possible, R & D market opportunities were related to major budget items. New R & D opportunities were identified for the Environmental Protection Agency, the Department of Transportation and for selective programs in NASA and DOD.

Problems of Selling to the Government

The panel generating the most discussion was focused on the problems encountered by small R & D firms in selling to the Federal Government. The attitude of the Federal R & D project manager (technical monitor) was acknowledged to be pro large business. A partial cause of this attitude is the manager's need to select the best qualified firm at the lowest cost. It was noted that it is paramount for small R & D firms to make their talents known to the pertinent Federal project managers. This is necessary to change the mental framework of the Federal project manager who has been acclimated too long to doing R & D business only with a large organizational structure. Through proper contact, the Federal manager would learn that small R & D firms are capable of being more creative, more flexible, and require generally less time and cost to produce a research product than their large competitors.

It was brought out that the existing procurement regulations are a definite barrier to the smaller R & D firms. The concept of small firms as suppliers of R & D is relatively new and not accepted by some agencies of the Federal Government. Some agencies purchase a disproportionate amount of research from universities and nonprofits as opposed to contracts with "for-profit" firms. To circumvent this difficulty, research firms have been known to form nonprofit foundations.

Small firms encounter unfair cost competition when they have to compete with universities. The latter pay no taxes, receive State and Federal subsidies, utilize lower paid young researchers and absorb the cost of proposals in educational salaries. Also, it was brought out that small firms need to be better protected in the submission of unsolicited proposals regarding their proprietary ideas and patent rights.

One of the major problems facing small R & D firms is the lack of timely communication with the Federal R & D technical monitor. Reliance on the Commerce Business Daily as an information exchange is not effective. Reference was made to the "R & D Opportunities Catalog" that was developed by Midwest Research Institute as a means to alleviate the communications problem. A special problem noted was the unresponsiveness on the part of the Federal Government to unsolicited proposals from small R & D firms. As a result, small firms feel that it is not worthwhile to submit them, thereby resulting in a less imaginative Federal technical program.

Non-Federal Markets

The panel on non-Federal R & D markets pinpointed several interesting new target areas. Foreign customers represent a neglected area of R & D selling. A large, potential, untapped R & D market is represented also by the State and local governments. This is a disaggregated market characterized by special problems such as small-scale funding and a relatively unsophisticated customer who cannot afford to take risks and who, in many cases, faces a scarcity of resources.

The State and local governments offer particularly challenging opportunities in the following areas: more efficient health care delivery systems and education systems; promotion of economic development; more rational transportation systems of a local, State and regional nature; improved environmental management systems; better land use; and solutions to the key problems faced by the cities such as better crime prevention, fire prevention, sanitation, housing, etc. Opportunities, of course, exist in the area of industrial and commercial contracting for the small R & D firm. Historically, many R & D firms have used this market to the exclusion of all others.

Managing Financial Growth

One of the panels discussed the various opportunities available to small R & D firms for their financial growth. An explanation was given on how the SBA could assist in financing R & D firms. A commercial bank representative stressed the basic factors that banks take into account in assessing a loan applicant. A representative from a venture capital institution enumerated the various stages of an R & D company's growth during which the firm may be in particular need of capital. The financing alternatives available to the small R & D firm were outlined. A company President reminded the R & D community that there also is need on their part for well defined financial management and control. The necessary elements, such as financial planning, periodic evaluation, an effective information system, and the ability to assess future needs were discussed.

Strengthening the Small R & D Firm

The small R & D firm often neglects the various managerial aspects simply because R & D entrepreneurs generally have a scientific, and not a management oriented background. The audience was cautioned that planning a research project is a crucial activity and that the chance of failure is higher the longer the research project. Attracting and keeping R & D personnel has at times been a particular problem for the small R & D firm. Because a small R & D firm depends more upon its technical department than any other, it is necessary to develop the proper environment to keep key people. There is as much need to maintain an enlightened personnel policy in the R & D firm as in any large conglomerate.

An approach that can strengthen R & D results are various cooperative efforts among firms. This can involve pooling of financing interests, personnel facilities and even testing. Unfortunately, one of the barriers to more cooperative R & D efforts is the antitrust laws. These should be reexamined in light of the benefits that cooperative R & D efforts can produce.

Technology Transfer

At the Los Angeles conference, a panel was devoted to a discussion of the issues concerning technology transfer. Particular emphasis was placed on the technology utilization

program that has been developed by NASA. A display booth, manned by NASA personnel, exhibited examples of the abstracts available through the NASA program. An expert from the Defense Documentation Center alerted the audience on the important sources of technical information which the Department of Defense has available for them. SBA was particularly active on this panel in describing how small R & D firms can be assisted through technology transfer, particularly in fields where knowledge is needed to meet some of the new civilian-oriented demands.

It was pointed out that many nondefense and nonspace areas represented new opportunities for the small R & D firm that can channel its energies in this direction. A prime example is environmental control which represents enormous problems, particularly for small firms and firms with older plant and equipment. Many of these firms will encounter disproportionately high costs in meeting compliance standards. They generally do not have the technical know-how to determine even what kinds of pollution abatement equipment or processes are needed to meet the required standards. A description was given of SBA's modest but effective Technology Utilization Program.

New Opportunities For The Small R & D Firm

Two panels presented discussions on the new opportunities for the small R & D firm and their role in today's environment. President Nixon's Science and Technology Message and his 1972 State of the Union Message were discussed in terms of their impact on small R & D firms. Representatives from the National Science Foundation and the National Bureau of Standards discussed the Administration's new experimental R & D Incentive Program. Approximately $40 million will be made available to the National Science Foundation and the National Bureau of Standards to develop new ways in which the private sector can apply science and technology to our unmet civilian needs. This effort, called the Experimental Technology Incentives Program (ETIP), will provide a better understanding of the market environment for research and innovation.

It was noted that small R & D firms need some type of association that could bring the small R & D community together and present their views to Congress, the contracting agencies and the SBA. It was recommended that the association not be a

lobbying organization but rather one that would help to develop policy.

Also, it was pointed out that the R & D area is a segment of the private market that should work more "perfectly" than it does. The benefits of R & D are well diffused throughout the market place and accrue to many. In this sense, the benefits of R & D are "externalized." While the benefits of R & D accrue to many, the costs of R & D often have to be paid solely by the R & D firm. Government could perfect this market through some mechanism so that the costs of R & D are as well diffused as its benefits.

Conference Recommendations

The two R & D conferences produced a number of important recommendations to help strengthen the small R & D community. The recommendations are as follows:

1. This Conference calls upon the Small Business Administration to develop a lending program specifically for small R & D firms which will reflect the high-risk nature of the industry.

2. Every Government agency should move to eliminate the resistance to the awarding of sole source contracts following the submission of unsolicited proposals by small R & D firms.

3. Pertaining to Section 504 of the HUD and Independent Offices Appropriations Act, which requires cost sharing on all unsolicited research proposals, eliminate this requirement in all cases where there is no mutuality of interests.

4. It is the recommendation of this Conference that an association of small R & D firms be formed to foster the growth and further the objectives of the small R & D community.

5. The Federal Government should encourage the expansion of sources for venture capital for small technological entrepreneurs.

6. The Federal Government should prepare a program to subsidize young scientists working in small R & D firms.

7. It was the expression of the Conference that many significant problems and barriers exist for small R & D firms trying to do business with the Federal Government. To pursue action on these problem areas we recommend that the Chairman of this Conference appoint a five-man panel of industry representatives to pursue the following areas:

   A. To cover present attitude changes and meet with major agencies to discuss:

      (1) Top level endorsement of the benefit of small R & D firms.

      (2) The formulation of a merit system for technical procurement officers to encourage small business and particularly small R & D firms.

      (3) Setting up arrangements to consult with the ASPR Committee to discuss the many problems raised by procurement regulations.

      (4) To investigate the possibility of splitting up R & D funds to aid small R & D firms.

      (5) Providing profit incentives to encourage small business R & D.

      (6) To improve the Small Business Liaison Officer function and also the liaison with the Small Business Association.

It is also recommended that the Chairman appoint a five-man panel of industry representatives to:

   B. Pursue legislative changes that appear to be required for:

      (1) Small Business R & D set-aside programs

      (2) Equating Not-for-Profit, University, and In-house Labs with small R & D operating for profit.

(3) Conferring with Commissions on Government procurement.

(4) Visiting with Congressional Committees.

8. A Small R & D Firm G. I. Bill - The Conference recommends that a package of government benefits be established for small R & D firms phasing out of Defense and Aerospace work to assist them to convert to civilian R & D applications. The purpose at the corporate level would be the same as the Veterans' G. I. Bill at the individual level. Benefits would consist of conversion incentives, loans or loan guarantees, and grants-in-aid for retraining of technologists and managers to the civilian R & D market.

9. Venture Development Centers - The Conference recommends that the Government provide direct assistance by grants to private venture development centers. These centers would furnish start-up assistance to would-be companies. Management consulting and assistance should be provided to entrepreneurs to help plan and structure new organizations to the point where they are ready to approach venture capitalists. OEO has already established such grants for minority enterprises.

10. Recommendations on Incentives - In order to stimulate the innovative process for qualified ideas and companies, a plan must be developed for providing substantial incentives that will insure the starting of R & D businesses and will also insure that they can keep going. Our competitors around the world have such programs, whereas the United States does not. If we are to compete successfully in the world market and keep our country strong economically, such a program must be implemented, which would include the following:

A. Provide Federal guarantees of up to 50 percent on equity capital provided by investment banking organizations. Guidelines would be set up so that these guarantees would liquidate themselves after a period of time, or after certain milestones had been reached in the company's development. Such a program would greatly reduce the risk to the investor and greatly stimulate the process for nurturing innovative ideas.

The investment program would be monitored by NSF, SBA, or a new Federal agency having the appropriate staff to monitor this activity on a timely basis.

B. In order to provide working capital to R & D firms to keep them going, the Federal Government should provide guarantees to commercial banks on money loans for this purpose. The Government agencies would make up the difference betweeen the company's normal collateral (receivables and others) and 100 percent of the loan value. This participation would vary in each situation but would make a tremendous difference in the attitude of local banks toward the company.

C. A Project Bank should be set up by the agency maintaining this incentive program that would contain a large list of many technological problems that need solution in many fields. Qualified companies that were experiencing difficulties in maintaining sales and employment levels could apply to the agency to seek a contract. Once their technical capability was demonstrated, they could receive a sole-source contract for work on the problem.

D. Other incentives to small R & D should include income tax reductions (15 percent); tax holidays of up to three years for work in advanced areas, other tax considerations for capital expenditures, and depreciation.

11. Committee - A permanent committee composed of Government and industry members should be formed to provide a focal point for liaison between Government and the community of small R & D firms. This committee would provide a means of communications, discussion of problems and other related items on all matters affecting the role of small R & D firms with all pertinent agencies of the Government.

12. In recognition of the innovative role of small R & D companies, as a first step, a significant proportion of the President's proposed R & D Incentive Program should be specifically allocated to small R & D firms.

13. It is the sense of this Conference that the purpose and objective of the National Science Policy and Priorities Act would be of great benefit to the small R & D community and the Nation as a whole and should accordingly be enacted into law.

14. SBA should be encouraged to broaden the scope of its surveys of Government agencies and facilities to determine the percentage of R & D contracts awarded to small business; that SBA present these data to the President and key members of Congress; and that some form of recognition be provided to procurement decision makers for achieving adequate small business participation.

15. SBA should undertake an educational program to acquaint technical personnel in the Federal Government on the capability of small R & D firms.

16. Congress should implement the recommended changes to the Small Business Investment Company program contained in the President's Message on Science and Technology.

Footnote

[1] Technological Innovation: Its Environment and Management, January, 1967, U. S. Department of Commerce, Washington, D. C. (Government Printing Office), pp. 16-18.

Note: As a result of the Conferences a National Association representing small research firms is being organized. The Association is called The American Association of Small Research Companies presently located at Suite 751, 2000 K Street, N. W., Washington, D.C. 20006.

Copies of the proceedings of the Washington R & D Conference are now available and can be obtained through the Private Enterprise Center, School of Business Administration, The American University, Massachusetts and Nebraska Avenues, N. W., Washington, D. C. 20016.

NEW SBA PROGRAMS

By Dr. Grant C. Moon

Introduction

Change seems inevitable. Reasons for change sometimes appear vague and enigmatic but frequently are explainable. If a person reflects on the economic, social and political vicissitudes of the last decade it is fairly easy to identify reasons why the Small Business Administration has added eight new programs within the last four years. Recognition of ecological problems, consumer legislation, imbalance of business ownership between majorities and minorities, growing complexities of business management, changes in population growth and characteristics and fluctuations in the economy present some valid reasons for these new programs.

These eight programs are briefly presented in the following order:

1. Revocable Revolving Line of Credit
2. Small Business Institutes
3. Minority Vendors Program
4. Surety Bond Guarantee Program
5. Consumer Protection Loans
6. Occupational Safety and Health Program (Disaster Loans)
7. Lease Guarantee Program
8. Secondary Market Program

Revocable Revolving Line of Credit

One of the newest programs of the Small Business Administration is the revolving line of credit. This is a program to aid small concerns with fluctuating financial requirements, such as construction contractors hiring a crew and purchasing materials to complete a contract construction job. A pilot program began in January 1971 and was nationwide by May 1971.

The authority for the line of credit is the SBA Act, Section 7(a) and Title IV of the Economic Opportunity Act of 1964. Under Section 7(a) there is a limit of $350,000 or 90 percent of the line of credit, whichever is the lesser. The limit, if the owner is socially or economically disadvantaged, under the Economic Opportunity Program, is a maximum of $50,000 or 90 percent of the line of credit, whichever is the lesser.

The line of credit is for a period of 12 months from date of first disbursement. Except in the case of larger contracts the SBA Regional and District Directors may approve the line of credit for as much as 18 months. Sixty days prior to termination the lender and SBA review the situation, and if desirable, another agreement may be consummated. The present limit is 18 months for each agreement.

The interest rate is determined by the lender charging the normal line of credit interest rate and/or fees. Other SBA directive guidelines on interest rates criteria do not apply to this program.

The eligibility is similar to those for SBA business loans. However, the line of credit can be used for labor and materials only and not used for debt payment or to purchase inventories or fixed assets. The program is designed for small construction contractors or manufacturing or service firms who provide a specific product or service under an assignable contract. The business concern must have been in operation for the 12 months preceding the date of application and show evidence that it was unable to obtain a line of credit without an SBA guaranty.

In a pilot stage there is an expansion of the program to other types of businesses for use in receivables and inventories. Five cities are serving in this pilot program. If deemed desirable after being evaluated, this program will be expanded.

For approximately the first two months of the program, and including the pilot program of four months, there were 30 lines of credit guaranteed for a total amount of $2.4 million with approximately 90 percent or $2.1 million being SBA's share. During Fiscal Year 1972, 343 lines of credit were guaranteed for a total amount of $31.5 million with the SBA share amounting to $27.9 million. During the first three months of FY 1973, an additional 174 lines of credit were guaranteed for $16.3 million, with the SBA share amounting to $14.6 million.

Some of the advantages of having a line of credit rather than a straight loan is that the business firm pays interest only on the amount and for the time the credit is used. It presents the businessman with the opportunity to better utilize his working capital by ironing out his financial requirements where fluctuations are prevalent. Purchases can be made extracting the best price without some of the pressures of working against a short fuse.

Small Business Institutes

For many years the colleges and universities have been seeking ways to bridge the gap from academia to the business world. Also, SBA has been trying to increase its available management counseling services to small business owners and managers.

In an effort to assist with both of these objectives a new program was launched this Fall (1972). It is a program to furnish management counseling by university students under faculty supervision to small business owners and managers. SBA provides the university or college with the small business cases from its loanees and then works closely with the university faculty and student members. The participating schools can offer a practical training ground for their students.

The program provides tax-supported and private schools with valuable and measurable opportunities to provide community services. It also will open the door for academic participation in such rapidly-developing areas as technology transfer and utilization by facilitating transfer of information from developers and inventors to users.

The SBA hopes to serve as a catalytic influence in expanding its management counseling and also to substantially aid in identifying small business clients to participate in the program.

Conferences were held in August 1972, in which representatives of SBA and universities and colleges participated. The conference in Denver, Colorado, and Silver Spring, Maryland, provided for an exchange of information on the objectives and techniques employed in student counseling.

There are thousands, possibly millions, of small business managers who need management assistance and many cannot afford or do not have a desire to obtain it. Some are reluctant to seek assistance of any kind, trying to maintain as much independence as possible. Educational institutions and SBA recognize that this presents a hurdle, but one which can be surmounted as evidenced by the success stories of schools of business administration that have been counseling small business owners for some years.

Time to develop this new national pilot program following the conferences was very short. However, as of November 17, 1972, there were some 37 universities and colleges cooperating with SBA in providing management counseling to approximately 600 small business owners and managers during the fall semester of 1972.

Minority Vendors Program

One of the newest programs in SBA became operational in November 1972. It is a program designed to match minority entrepreneurs having goods and services to sell with major private corporations wishing to purchase the goods and services.

The objectives of the program, which is using a centralized computer system, are threefold:

1. To identify the minority firms interested in selling to private major corporations;

2. To provide special forms of assistance to minority firms to overcome problems identified by the large purchasers; and

3. To identify business venture opportunities for the minority business community.

The proposed procedure is for the large purchaser to indicate items he wishes to purchase and the point of delivery. A computer search is made by SBA to match up producers with the items desired. The list of minority producers for the requested items or services will be forwarded to the purchaser. The purchaser in turn will contact the firm(s) he chooses. The program should increase the share of the private sector purchases of goods and services going to the minority business community.

After gaining a successful track record of developing minority business in concert with big business, it seems that a natural result will be a mutually beneficial partnership venture between SBA and big business for the development of all small businesses.

As of November 17, 1972, less than two months after mailing 25,000 letters to minority manufacturers, wholesalers and service firms, 220 responses have been received. Also, from the mailing to 1,000 large firms SBA has received 140 replies stating their interest in participating in the program.

Surety Bond Guarantee Program

Purpose. Studies disclosed that small building contractors were "hurting" because of the economic pressures of a recession in their industry. Bid, payment and performance bonds were often not available to the small contractor.

Surety companies have established a standard requirement that a firm must have $25,000 in "net quick" liquid funds, i.e., funds that can be available within two hours. Also, the small firm may require more administrative expense on the part of the surety company because they may not be listed in Dun & Bradstreet or other credit reporting systems and, therefore, would require time and expense to check out. Additionally, the small firm may not generate enough of a premium for the surety company to "bother" with it. Without bonding small firms are considered non-responsive bidders, and the contracts go to firms able to get bond coverage.

Program Development. Accordingly, the Surety Bond Guarantee Program was established under the Small Business Investment Act, Title IV, Part B of Public Law 91-609 on January 8, 1971. The purpose was to assist small contractors indirectly by guaranteeing up to 90 percent of the potential losses of private surety companies on a particular contract guaranteed by SBA. This should assist small contractors previously denied access to contracts because they could not obtain proper and adequate bonding.

After two pilot projects were evaluated in the Spring of 1971, the program was delegated to the ten SBA Regional Offices, as of September 1971. Twenty-one bonds were guaranteed between April and July 1, 1971, and seven of these bonds resulted in contract awards of $312,252.

Program Results. During Fiscal Year 1972, SBA received 3,176 applications for bond guarantee assistance from contractors and 2,362 of these cases were submitted by 62 surety companies. SBA guaranteed 98 percent, or 2,316 cases. Fifty-eight percent (or 1,339) of these contractors received the jobs sought, having a total value of $94.4 million. The average contract value was $70,428.

The first quarter of FY 1973 continued to reflect a high level of program activity. The ten SBA Regional Offices received 1,828 applications for assistance. Of these requests, the sureties sought SBA guarantees on 1,590 cases, and 1,150 of these developed into contract awards worth $73.4 million.

The above results ($168.1 million in contracts since the program's inception) were accomplished on behalf of small contracting concerns despite such constraints as: (1) requiring that reasonableness of performance be established, (2) insisting that each firm be a small business concern, and (3) charging the contractor, as well as the sureties, some guarantee fees. Without the program it is likely that many of these contracts would have gone to large firms, possibly at higher prices.

Bonding Costs. The SBA charge to the contractors for bond guarantees was limited to $500, but this proved to be an unnecessary and inequitable restriction which has been changed to a straight $2 per $1,000 of the contract price. In the case of partial bonds, the contractor shall pay SBA either two-tenths of one percent ($2/$1,000) of the contract's face value or 20 percent of the premium charged by the surety, whichever is less. Besides providing bond guarantees for small construction contractors, SBA can also extend guarantees to service and supply contractors--janitorial service contractors and small manufacturers required to furnish a supply bond for products which they are to deliver.

Planned Growth. The acceptance and growth of the program has been substantial, as alluded to previously. For example, the goal for FY 1972 was 710 bond guarantees; the actual performance was 2,316 guarantees issued for 326 percent of the projected goal. The projection for FY 1973 is 5,500 guarantees and for FY 1974, the goal is 7,200 bond guarantees with a projected aggregate value of $567 million.

Based on projections of FY 1972 figures, which reflect 58 percent of all bond guarantees resulting in contract awards, the 7,200 bond guarantees in FY 1974 will result in approximately 4,000 contract awards worth $280 million. Our 5,500 bond guarantees in FY 1973 should result in 2,750 contract awards worth $192.5 million.

Consumer Protection Loans

Increased attention is being given to ecology. This interest has and will result in legislation to help maintain or improve the environment. Compliance with environmental standards and regulations is being required of business

concerns making this an important problem area for small business owners. Firms guilty of one or more of the various forms of pollution should recognize the importance and the requirement that such practices must cease. New entrepreneurs should carefully plan to comply with present and contemplated legislation concerning pollution and our ecology.

As part of the Disaster Loan Program, SBA began in May 1971, to make loans to overcome the economic injury caused by requirements of the Egg Products Inspection Act of 1970, The Wholesome Poultry Products Act of 1968, and the Wholesome Meat Act of 1967. Also, these loans may be available in anticipation of other consumer protection legislation which will have an economic impact on small businesses.

The loans authorized under the Small Business Act, Section 7(b)(5), have a maturity up to 30 years, have no dollar limit, and immediate participation and guaranteed loans can be guaranteed by SBA up to 90 percent.

During the first quarter of FY 1973 the interest rate for SBA's share was 5 3/8 percent and the bank's share 7 1/2 percent maximum for immediate participation and 8 1/4 percent for guaranty loans.

To be eligible, a firm must be a small business and plan to use the loan proceeds for other than working capital except in special circumstances.

During FY 1972, a total of 123 consumer protection loans for $18.5 million were approved by SBA, and 35 additional loans for $2.9 million were approved from private funds. Fourteen SBA loans and seven private loans were approved during the first two months of the program in May and June 1971.

Occupational Safety and Health Program (Disaster Loans)

The Occupational Safety and Health Act of 1970, laudable in purpose, undertook the tremendous task of improving the working conditions where people are employed. No effort with such magnitude could be undertaken without encountering some difficulties. Compliance with the requirements of the OSHA legislation will result in an economic burden of varying

proportions to affected small business firms, particularly in the manufacturing and construction industries.

Representative William L. Hungate, Chairman of the Subcommittee on Environmental Problems Affecting Small Business, stated in the report dated August 15, 1972, House Report No. 92-1341, that although the legislation is commendable. . . "the Federal bureaucracy sometimes manages to complicate matters by establishing harsh and irrelevant rules and regulations with little attention given to the impact on small business."

The law became effective on August 27, 1971 and is estimated to cover more than 4.1 million businesses and 57 million employees. It includes almost every employer in the Nation, including the professions and services as well as commercial establishments, farmers, and others in agriculture.

Requirements of the Law. The Act established the Occupational Safety and Health Administration (OSHA) within the Department of Labor to administer the law. The law requires each employer, "to furnish to each of his employees, employment and a place of employment which are free from recognized hazards that are causing or likely to cause death or serious physical harm."

Inspections are authorized, after which violations are cited and proposed penalties are given to the employer. The employer has a certain length of time in which to correct the violation. If he does not correct the violations, he may be assessed a penalty in addition to the originally proposed penalty. Penalties may be up to $1,000 for serious and non-serious violations and, in addition, up to $1,000 per day for each day the employer fails to comply. Penalties up to $10,000 may be assessed for willful violations, and there are criminal penalties, including up to six months in jail, for willful violations that result in death.

The severity of the penalties, the power vested in inspectors and the vulnerability of small firms suggest the tremendous impact this law can have on small businesses. Even one $1,000 fine could result in the failure of many marginal small businesses. With several violations the number of failures could increase dramatically.

Employees, employers and consumers may ultimately realize important physical and mental well-being as a result of this legislation. Adjustments in the regulations and procedures seem necessary at this time, particularly as they relate to the standards, issuing of citations and penalties, time to correct violations and method of assessing violations against willful neglect or sabotage by employees.

The Act also provides for loans by the Small Business Administration which are similar to the consumer protection loans. Under the Occupational Safety and Health Act of 1970, the employers in small concerns may apply for SBA loans to voluntarily meet the safety and health standards, or they may apply after they have received a citation from the Secretary of Labor.

Hearings. The hearings by the Subcommittee on Environmental Problems Affecting Small Business of the House Select Committee on Small Business disclosed that the single most important problem of the Occupational Safety and Health Act is the inability of the small businessman to learn what is expected of him. The standards promulgated by the Secretary of Labor, including the referenced material, presented a formidable mound of 1,541 pages of technical regulations that few people can understand.

A small businessman who desires to comply with the law and requests that an OSHA official visit his premises to show and explain to him what is required is told that the official would have to make an inspection and issue citations and penalties if he finds any violations.

Recommendations. Several recommendations were offered by the Subcommittee on Environmental Problems Affecting Small Business as a result of the testimony, evidence, and findings connected to their hearings. They recommend that the U.S. Department of Labor revise its standards to make them "clear, concise and comprehensible so that small businessmen can know what the law and standards require of them." Also, they recommend that standards vary among industries and businesses, that these standards and other pertinent information be published, and that the Department of Labor cooperate with SBA in certifying small firms which use loan funds as prescribed to fulfill requirements.

The Subcommittee further recommends that SBA should exercise a more forceful role within the Executive Branch of Government as an advocate of small business concerning occupational safety and health; should offer a comprehensive program to provide management and technical assistance to small businesses which request aid with respect to the OSHA requirements; and should publicize SBA programs for small businesses affected by the OSHA.

Additional legislation to amend the OSHA should be considered by legislative committees. Changes in the law could include: (1) the rights of small business owners to request an initial inspection without the inspector issuing citations or penalties unless imminent danger exists; (2) citation and penalizing of employees who willfully violate standards applicable to their own conduct; and (3) issuance by the Department of Labor of separate standards, where appropriate, for distinct industries and businesses.

First Year's Results. What are the results of one year's activities under OSHA? Mr. Hamilton Fairburn, a representative of OSHA reported to the convention of the National Tire Dealers and Retreaders Association (NTDRA) and in the Association trade publication Modern Tire Dealer, October 1972, page 63, that some 33,000 OSHA inspections were conducted last year. Three-fourths of these inspections turned up noncompliance instances and 103,000 violations were issued by OSHA for a total of $2 million in fines with an average of $22 per violation.

In the courts, Mr. Fairburn noted that OSHA wins nine out of ten cases. He also suggested OSHA may change standards for different industries and businesses, and that clarification of regulations would be forthcoming.

SBA had approved 9 loans for $800,000 by June 30, 1972, and for the first quarter of FY 1973, SBA approved 9 loans for $1.4 million. These loans can mature up to 30 years, have no dollar limit and the interest rates are 5 3/8 percent for SBA share, 7 1/4 maximum percent for the bank share on immediate participation, and 8 1/4 percent for guarantee loans, during the first quarter of 1973. The proceeds cannot be used for working capital, except for special purposes.

Also, SBA has furnished management counseling to small business owners and the inspectors to ameliorate situations where violations and fines are questionable.

Lease Guarantee Program

Several studies concerning the alleged nonavailbility of prime space for small firms were conducted in the early 1960's. One of these studies was done by the University of Connecticut for the Small Business Administration under the Management Research Grant Program. The studies indicated that small firms were being deprived of prime space in shopping centers and other areas for several reasons including the requirement by developers and financiers that 70 percent of the businesses in a shopping center had to be triple A rated. A AAA rating indicates a million dollars in net worth. To some businesses, particularly retail firms, a good location is vital to success. A few leases were guaranteed by insurance companies during the depression of the 1930's, but the experience was not profitable and was discontinued.

Recognizing the need to assist small firms obtain prime space, the House Select Committee on Small Business held hearings on the problem in 1959, 1961 and 1963.

Legislation was passed in 1965 under the Small Business Investment Act, Title IV, enabling SBA directly, or indirectly through insurance companies, to guarantee the payment of rentals under leases entered into by small businessmen. The first policy was issued by SBA in the Fall of 1967 to a small metalworking shop being displaced by an interstate highway in Cleveland, Ohio. In January 1968, the program was broadened to include all small businesses.

Policy Changes in Lease Guarantee Program. Several changes in program policy have been made during the past nearly five years. For example, a maximum of $2.5 million rental exposure has been set, following a request for a guarantee of $26.5 million for one firm. (The policy was not issued). Another change is to limit the amount of exposure in certain industries, such as the fast foods industry. One reason being that with limited resources SBA should spread the opportunities and the risks. Still another policy change is to limit the special purpose facilities to 80 percent of the economic rent.

What are the Lease Guarantee Insurance Costs? A three months' advance rent is required of the lessee, which is held in escrow, or the landlord must accept a three-month rent deductible endorsement to the insurance policy. If no default occurs in loss of rental payments, the advance rent payment is returned to the small business lessee at the termination of the lease, plus four percent per annum interest.

A premium cost of from 6.5 percent to 2.8 percent for 5 to 20 years respectively, is payable in advance and is not refundable. For example, for a 15-year lease of $1,000 per month rent, the premium cost is computed as follows:

180 months (15 years) @ $1,000 per month = $180,000

Premium @ 2.8% x $180,000 = $5,040

Participation with Insurance Companies. The statute requires that the program be operated to the maximum extent possible in participation with the private sector. Accordingly, SBA has signed reinsurance agreements with a number of private insurance companies. The insurer, private company or SBA, must be reasonably certain that the small business lessee has a viable business situation, is a competent manager, has adequate financial resources, has a potential market large enough to assure a profitable operation at the proposed site and will be paying an economic or market rental. SBA developed a risk analysis system to help assure that the above factors represent a reasonable chance that the business can meet its monthly rental payments for the life of the lease.

Who Benefits?

The small businessman (lessee) uses the credit of the insurer to obtain better space and location than was previously available to him. He also can conserve his limited financial resources.

The landlord (lessor) has more options open to him by having leases guaranteed. He can be more flexible in tenant mix, and by having owners rather than absentee owners on the premises, more business may be generated resulting in

a better shopping center or business site. Additionally, the local small businessman may be willing to pay higher rents to get the prime space than the national chains. This could increase the cash flow for the landlord. Also, in some instances, the bank has reduced the interest rate when presented with a government guaranteed lease. The reduced interest helps to keep the debt service costs down.

The lender (financier) has less risk because of the lease guarantee assuring prompt payment of the rent and, thus, he can more easily meet his debt service. Again, interest rates may be less, or at least competitive, thereby providing interest income with a minimum risk.

The public benefits by having a number of small competitive businesses from which to purchase their goods and services. Further, this program has helped to upgrade downtown areas, rebuild inner cities and promote the economic health of communities.

Results During Past 4 1/2 Years

Cumulative as of June 30, 1972, guarantees had been approved to 1,029 small businesses for a total rental value of $495.1 million. Of this total 326 guarantees for $149.3 million were made during FY 1972. During the first three months of FY 1973, an additional 114 leases were guaranteed for $57.6 million total rental value.

Secondary Market Program

SBA is seeking to develop new sources of private funds to aid small businesses. Approximately 85 percent of SBA's total business loan dollars are now coming from the banks under the Agency's loan guarantee program. Guaranteed loans amounted to only 7.9 percent of the total business loans approved in FY 1964 and in FY 1972 represented approximately 90 percent.

Accordingly, there appears to be a need to look beyond the banks for new sources of investment capital to aid the approximately 8 million small business firms.

In order to enable participating banks in the loan guaranty program to recoup advanced funds, a technique of secondary participation has been developed and is presently being used in various parts of the country. The original participating banks have arranged to sell the portion of the loan guaranteed by SBA to other banks and institutional investors, such as insurance companies, credit unions, and pension funds.

This program has advantages for both the buyer and seller. The buyer of the guaranteed loan obtains a government-backed, low-risk investment with a yield which is usually more attractive than the return on general market obligations of similar quality. The seller, who usually retains 10 percent of the loan, reduces his exposure and at the same time increases his liquidity and frees funds for further lending.

The basic technique is being used in 22 States but other States have expressed interest in the program. Private and public investors had purchased more than $93 million SBA guaranteed loans as of August 15, 1972.

Secondary participation is providing a source of funds for original lenders in many communities and States. This investment vehicle can be utilized in other States to make more funds available for small businesses without exerting undue pressure on the Federal budget.

AN OVERVIEW OF THE MINORITY ENTERPRISE SMALL BUSINESS INVESTMENT COMPANY (MESBIC) PROGRAM

By Stanley M. Linchuck

Creation of the MESBIC Program

The lack of a sufficient equity capital base is a financial characteristic of most new businesses and certainly most firms owned by persons who are socially or economically disadvantaged. Along with their need for adequate capitalization, they require technical and management assistance to compete and grow. The MESBIC Program of SBA is a private sector/Government operation which plays an important role in addressing these problems. Launched in November 1969, the MESBIC Program is designed to help meet the great demand for long-term equity capital and long-term loan funds for socially or economically disadvantaged businesses. This program is an offshoot of the SBA Small Business Investment Company (SBIC) Program, authorized by the Small Business Investment Act of 1958.

Need for MESBIC's

Because of high risks involved and lack of realistic growth possibilities prior to 1969, SBIC's had not invested significant capital in small businesses owned by the socially or economically disadvantaged. The lack of capital sources and personal capital accumulation by minorities virtually excluded them from a chance to obtain venture capital to start or expand a business.

Beneficiaries of the MESBIC Program

The Minority Enterprise Small Business Investment Company Program represents the first and only institutional source of venture capital in this country catering exclusively to would-be entrepreneurs and existing businessmen who are socially or economically disadvantaged. Addition of the MESBIC concept to SBA's program for Small Business Investment Companies permits specialization by such companies to make venture capital available to those firms whose owners and operators cannot obtain funding from conventional sources.

Private Sector/Government Partnership of MESBIC's

MESBIC's are privately-owned and privately-operated investment companies incorporated under State law, but licensed, regulated and, in part, financed by SBA. They make equity-type investments and provide long-term loan funds as well as management assistance to disadvantaged small businesses.

Sponsorship of MESBIC's

Fundamentally, a MESBIC is formed and supported by a strong parent organization able to provide financial resources and management expertise to the MESBIC and its portfolio companies, particularly in the early years of the MESBIC. To date they have been formed under the sponsorship of some of the Nation's largest corporations, as well as sophisticated financial groups and other organizations. Such private sponsors may invest a minimum of $150,000 in order to establish a MESBIC, and the company formed becomes eligible to borrow from SBA $2.00 for every $1.00 of their privately-invested funds. Thus a $150,000 MESBIC could obtain from SBA $300,000 -- 2 to 1 leverage on a long-term subordinated basis thereby having total resources of $450,000. Organizations are encouraged by SBA to start MESBIC's with more private capital than the $150,000 minimum.

Number and Capitalization of MESBIC's

In mid-October 1972, fifty-one licensed MESBIC's were operating out of their headquarters in 22 States and the District of Columbia. They had total private capital of $17.5 million and outstanding SBA funds totalling $4.8 million. Average private capitalization of these MESBIC's was $343,000.

Loans and Investments of MESBIC's

Latest financial reports received by SBA from 32 active and reporting MESBIC's and financial data compiled by SBA as of July 15, 1972, show total loans and investments by MESBIC's of $4.6 million outstanding to 285 disadvantaged small business concerns. Data on financings made by other MESBIC's are not included in the above statistics since such MESBIC's had not been in business long enough to require filing of financial reports with SBA, or they had made no financings in

the small business community.

Findings of Rutgers MESBIC Study

A broader insight of actual performance and impact of MESBIC's was gleaned from a recent study by Rutgers University Graduate School of Business. This study, covering 36 MESBIC's found that as of April 1, 1972, the MESBIC's had financed 422 small businesses with annual aggregate gross sales of $82 million and over 4,400 employees. It also found that these MESBIC's had invested $7.6 million and generated $36 million additional investment in minority businesses from sources other than the MESBIC's, including SBA, banks, other lending institutions and private sources.

Previous Limitations of the MESBIC Program

Prior to October there were some basic limitations associated with the program which hampered its effectiveness and which required legislative action to correct. For example, under the then current program MESBIC's could not fully avail themselves of all leverage authorized by the Small Business Investment Act. Also, like some new programs, the MESBIC program is hampered by high administrative start-up costs and high loss rates on loans. In the President's Minority Enterprise Message to Congress on October 13, 1971, and in his more recent message to Congress on March 18, 1972, he emphasized the need for proposed provisions to meet the capital requirements of minority business and to bolster generally the MESBIC program.

Recent Legislation

In this connection, by the middle of October 1972, a bill to amend the Small Business Investment Act of 1958 had passed both the Senate and the House of Representatives. It was signed by the President on October 27. Among other things the Small Business Investment Act of 1972 provides increased leverage of funds for MESBIC's (in effect 3 to 1 leverage applied to the third dollar "floor" has been lowered from $1 million MESBIC private capitalization to $500,000). Additionally, SBA now will be able to purchase from MESBIC's their preferred stock, thereby providing financing for them which previously was not available. MESBIC investors also can

receive increased tax advantages by being permitted to operate either under business corporation or nonprofit corporation statutes; and a MESBIC's interest burden on its debentures purchased by SBA will be reduced in the early years by a limited interest subsidy.

Value of the MESBIC Program

MESBIC's provide a meaningful investment in our Nation's future and strengthen the foundation of our free enterprise system by making financing and management assistance available for the first time to many of our citizens. In the relatively short period of its existence since 1969, the MESBIC program has shown great promise for socially or economically disadvantaged persons to enter and play a fundamental role in the mainstream of our free enterprise system.

OPPORTUNITIES FOR SMALL FIRMS IN MANUFACTURING

By Kaleel C. Skeirik

Summary

An analysis of a selected group of 198 manufacturing industries during the years 1958 and 1971, revealed that 113 were industries which historically provided excellent opportunities for small firms. However, of the 113 industries only 31 currently offer excellent opportunities and opportunities for small firms in the other 82 industries appear to be diminishing. The remaining 85 industries in this selected group of 198 industries offered little or no opportunities for small firms.

The 31 industries providing excellent opportunities have low concentration levels,[1] and the total number of small firms increased significantly between 1958 and 1971. Twenty-three of these industries were producer goods and only eight were consumer goods.[2]

Industries that provided little or no opportunities for small firms consisted of those industries with high concentration ratios and a small number of small firms. In this group of 85 industries, 32 reflected insignificant increases in the number of small firms while 37 had decreases between 1958 and 1967. These industries were fairly evenly divided between producer and consumer goods.

The 82 manufacturing industries with diminishing opportunities, which historically have been considered small-business oriented, are referred to as industries with changing opportunities. They have low concentration levels, most have large numbers of small firms, but all have had significant declines in the number of small firms between 1958 and 1971.

The industries with changing opportunities are represented by such consumer goods industries as food products, apparel and household furniture. Also in this category are producer goods industries, such as fabricated metals and textile mill products. These five industry lines accounted for 52 of the 82 industries with low concentration levels and a declining

number of small firms.

Many factors or conditions have contributed to the decline in the number of small firms and to the changes in industry structure, particularly in those industries with low concentration levels. These factors are discussed later in this report. An analysis is made of the changing patterns in the number of small firms on the basis of: (1) industries with the most favorable opportunities; (2) industries with the least opportunities; and (3) industries with changing opportunities.

Introduction

Opportunities for small firms in manufacturing vary considerably from industry to industry and over time. The availability of opportunities is due largely to one or more of the following factors:

1. Trends in growth and future prospects for the industry;

2. Dimensions of the industry (number of firms and establishments, size structure, competitive structure, including degree of and changes in concentration, and merger activity);

3. Absence, or existence of barriers to entry;

4. Technological change and innovation, and changes in economies of scale;

5. Product characteristics, i.e., size, weight and unit value related to distribution costs;

6. Technological and managerial requirements;

7. Customer and/or market characteristics;

8. Capital requirements;

9. Impact of imports;

10. Changing marketing patterns, disproportionate increase in the costs of the distribution of goods and advertising techniques and costs;

11. Problems arising out of new public concern relating to consumer protection, health and safety and pollution controls which may require substantial capital outlays.

However, an analysis of only 11 listed factors mentioned above may not always provide a satisfactory means for identifying industries that have opportunities for small firms. For example, it is possible that an industry may contain such favorable factors as excellent growth potential, low concentration levels, and low capital requirements, but may be experiencing a continued net decline in the number of small firms. In such a case, it would be more revealing to analyze the changes in the number of small firms in manufacturing by types of industry for a specified period of time, along with the factors mentioned earlier. This would provide a more accurate and reliable indicator of small business opportunities in an industry.

A major emphasis of this paper will be to examine and describe the trends and changes in the number of small firms for selected manufacturing industries between the years 1958-67 and 1967-71. For all years between 1958-67, changes in the number of small firms will be analyzed in relation to changes in concentration existing in each industry. The basic data used for these years are taken from special tabulations on size distribution of firms by four-digit SIC categories prepared for the SBA by the Bureau of the Census. The basic data used for the years 1967-71 are classified in the same manner as the Census data, but are on an establishment basis and are taken from the County Business Patterns reports.[1] The data from the above two sources contain approximately 422 four-digit SIC industry categories. However, this report is based on only the 198 industry categories which were selected for study in the earlier report, "Small Firms in the Manufacturing Industries."[2]

This report is a follow-up of the earlier SBA study on small firms in manufacturing.[3] The earlier study pointed out that a high proportion of industries in manufacturing had

experienced declines--many which were substantial declines--in the number of small firms[4] between the years 1958 and 1967. The study further pointed out that during this period (1) consumer goods industries had declines in the number of small firms more often than producer goods industries, (2) a larger number of small firms declined in the consumer goods industries than in producer goods industries, and (3) the number of large firms increased both in consumer goods and producer goods industries.

The earlier study stated that at a later date an industry by industry listing identifying areas of growth or decline in the small manufacturing sector would be provided later. This paper provides such a listing but the classification of industries used here is different from the classification given in the earlier study.

Industries in manufacturing are classified as providing: (1) the greatest opportunities for small firms; (2) the least opportunities, and (3) those in which the opportunities appear to be changing. Conditions and trends are summarized for those industries which provide the best opportunities for small firms.

Industries with the Most Favorable Opportunities

Studies in recent years indicate many manufacturing industries have become and others are becoming highly concentrated. In effect these changes increase the entry barriers to such industries for small firms. Most of these industries also contain one or more dominant firms.

In spite of the increase in the number of highly concentrated manufacturing industries, there are still many industries that have low or moderately low concentration levels, and contain large numbers of small firms. Historically, these industries have been characterized as "small business-oriented industries." An examination of the 198 manufacturing industries shows that a large proportion still have low concentration ratios, as well as large numbers of small firms. In 1967, 113 had concentration ratios of less than 45 percent (based on the four largest firm's share of industry total) and 84 of these industries contained 300 or more small firms.

Although 113 of the 198 selected manufacturing industries had low concentration ratios in 1967, trends in the number of small firms in each of these industries varied considerably. Between 1958 and 1967, 51 industries had increases in the number of small firms and 62 had declines. However, 20 of the 51 industries with increases in small firms had declines between 1967 and 1971, leaving only 31 industries with net increases in small firms between 1958 and 1971.

An analysis of the structure and composition of small manufacturers within each of the 31 industries indicates that opportunities are available for entry by and survival of small firms. A review of the current trends and future prospects for these industries also indicates that excellent opportunities are available to small firms. A brief summary on trends and outlook is presented for most of these industries in Appendix B.

Increases in the number of small manufacturers varied among the 31 industries. In at least 20 of these industries the increases were quite substantial between 1958 and 1971, whether measured on a percentage basis, or in absolute terms. Increases in the number of small firms on a percentage basis ranged between 10 and 84 percent, and increases in volume ranged from 50 to 5,000 small firms between 1958 and 1967.

The total number of small manufacturers in 22 of the 31 industries was relatively large, ranging between 500 and about 15,000 small firms in 1967. Seventeen of the 22 industries contain over 1,000 small firms each.

Concentration--the share of the industry total accounted for by the four largest firms--is quite low for most of the 31 industries with 25 falling below 30 percent. Also the greater proportion of these industries had declines in concentration with 18 having declines that ranged from one to 13 percent between 1958 and 1967. For specific data on the 31 industries see the two tables in Appendix A of this report. However, a listing of the 31 industries is shown on the following page:

Manufacturing Industries With Greatest Opportunities

(Industries with Low Concentration Ratios and Increases in Number of Small Firms Between 1958 and 1971)

Producer Goods

SIC Industry No.	Industry
2433	Prefabricated Wood Structures
2499	Wood Products, NEC
2641	Paper Coating and Glazing
2752	Commercial Printing, Lithographic
2753	Engraving and Plate Printing
2789	Bookbinding and Related Work
2791	Typesetting
2819	Industrial Inorganic Chemicals, NEC
2821	Plastic Materials and Resins
2899	Chemical Preparations, NEC
3079	Miscellaneous Plastics Products
3441	Fabricated Structural Steel
3443	Fabricated Platework (Boiler Shops)
3498	Fabricated Pipe and Fittings
3536	Hoists, Cranes and Monorails
3544	Special Dies, Tools, Jigs and Fixtures
3545	Machine Tool Accessories
3567	Industrial Furnaces and Ovens
3599	Miscellaneous Machinery, except Electrical
3662	Radio and TV Communication Equipment
3679	Electronic Components, NEC

3841	Surgical and Medical Instruments
3913	Lapidary Work

Consumer Goods

SIC Industry No.	Industry
2036	Fresh or Frozen Packaged Fish
2335	Women's and Misses' Dresses
2391	Curtains and Draperies
3791	Trailer Coaches
3842	Surgical Applicances and Supplies
3911	Jewelry, Precious Metal
3931	Musical Instruments
3949	Sporting and Athletic Goods, NEC

The classification of the 31 manufacturing industries which provide excellent opportunities for small firms, indicates only eight are consumer goods industries; the remaining 23 are producer goods industries.

On a broad two-digit industry basis, 14 different industry groups are represented among the 31 industries. The two groups with the largest representation of industries are nonelectrical machinery (SIC No. 35) with five related industries and printing and publishing (SIC No. 27) with four related industries. All of these nine industries are in the producer goods sector. Two other broad industry groups with three industries each are chemicals (SIC No. 28) and fabricated metal products (SIC No. 34). These latter industries are also in the producer goods sector.

Three of the eight consumer goods industries providing opportunities, fall generally within the recreation, tourism, and leisure time fields. They are sporting and athletic goods (SIC No. 3949), musical instruments (SIC No. 3931) and trailer coaches (SIC No. 3791). In recent years these areas have been expanding rapidly, as incomes have risen and working hours have been shortened. These three industries also have provided very good opportunities for small firms in

the past and should continue to do so in the future. It should be noted that the category trailer coaches in 1967 included not only recreational vehicles, but also mobile homes, which have been a very rapidly expanding industry in recent years due to the demand for low-cost housing.

The preceding analysis indicates that only a small number of manufacturing industries have the proper competitive climate to provide small firms with excellent opportunities for entry, and successful operation. Of particular significance is the poor representation such product lines as food and apparel in the consumer goods industries. Instead of providing the best opportunities for small firms, many of these industries have had significant declines in the number of small firms between 1958 and 1971. Such industries have been classified as industries with changing opportunities and are discussed in a later section of this report.

Industries With The Least Opportunities

In the previous section, it was stated that 85 of the 198 industries had high concentration levels, and most contained a relatively small number of firms of all sizes in 1967. These industries also contain relatively few small firms, with most numbering less than 50 small firms each.

In 1967 the 85 industries had concentration ratios of 45 percent or more (percent of industry total accounted for by the four largest firms), and almost one-half of the 85 had concentration ratios of 70 percent or more.

A review of the trends within the 85 industries reveals that concentration levels have declined to some extent in many of the highly concentrated industries (32 industries) and that many of the industries (37 industries) have increases in the number of small firms. However, these trends can be misleading. First, most of the decreases in concentration were not large, particularly in view of the already high concentration levels in so many industries. Another important consideration is that while the concentration level for the four largest firms may have declined, the concentration level for the eight or 12 largest firms increased or remained unchanged. Thus, the opportunities for small firms in such industries were not materially improved because changes in

concentration occurred only among the largest firms.

The increases in the number of small firms for the 37 highly concentrated industries also were not very large. Whatever effect these increases might have had, if any, on lowering concentration levels, concentration still remained high. Rather than indicating an improvement in the competitive situation, the increases in small firms may indicate the industries are approaching a stabilization of their structure with most of the market continuing to be dominated by large firms and the remainder served by a periphery of small specialized producers.

The 85 industries that provide the least opportunities are classified into two groups. One contains industries with high concentration ratios and declines in the number of small firms between 1958 and 1967. The other contains industries with high concentration ratios and increases in small firms within the same time span. The two groups are as follows:

Manufacturing Industries With
Least Opportunities

(Industries with High Concentration Ratios and Declines in Small Firms Between 1958 and 1967)

Producer Goods

SIC Industry No.	Industry
2046	Wet Corn Milling
2063	Beet Sugar
2092	Soybean Oil Mills
2093	Vegetable Oil Mills, NEC
2141	Tobacco Stemming and Redrying
2221	Weaving Mills, Synthetics
2291	Felt Goods, NEC
2445	Cooperage
2646	Pressed and Molded Pulp Goods
2813	Industrial Gases
2816	Inorganic Pigments
2833	Medicinals and Botanicals
2861	Gum and Wood Chemicals

2892	Explosives
3121	Industrial Leather Belting
3261	Vitreous Plumbing Fixtures
3275	Gypsum Products
3291	Abrasive Products
3296	Mineral Wool
3352	Aluminum Rolling and Drawing
3492	Safes and Vaults
3511	Steam Engines and Turbines
3534	Elevators and Moving Stairways
3612	Transformers
3671	Electron Tubes, Receiving Type
3721	Aircraft
3964	Needles, Pins and Fasteners

Consumer Goods

SIC Industry No.	Industry
2032	Canned Specialties
2043	Cereal Preparations
2073	Chewing Gum
2084	Wines, Brandy and Brandy Spirits
2085	Distilled Liquor, except Brandy
2087	Flavorings, Extracts and Syrups, NEC
2111	Cigarettes
2131	Chewing and Smoking Tobacco
2259	Knitting Mills, NEC
2279	Carpets and Rugs, NEC
2771	Greeting Card Publishing
2999	Petroleum and Coal Products, NEC
3263	Fine Earthenware Food Utensils
3421	Cutlery
3633	Household Laundry Equipment
3634	Electric Housewares and Fans

3636	Sewing Machines
3691	Storage Batteries
3872	Watchcases
3943	Children's Vehicles except Bicycles
3951	Pens and Mechanical Pencils

Manufacturing Industries With
Least Opportunities

(Industries With High Concentration Ratios and Increases in Small Firms Between 1958 and 1967)

Producer Goods

SIC Industry No.	Industry
2296	Tire and Cord Fabric
2823	Cellulosic Manmade Fibers
2824	Organic Fibers, Noncellulosic
2895	Carbon Black
3031	Reclaimed Rubber
3211	Flat Glass
3229	Pressed and Blown Glass, NEC
3262	Vitreous China Food Utensils
3313	Electrometallurgical Products
3331	Primary Copper
3332	Primary Lead
3334	Primary Aluminum
3392	Nonferrous Forgings
3411	Metal Cans
3572	Typewriters
3622	Industrial Controls
3624	Carbon and Graphite Products
3661	Telephone and Telegraph Apparatus
3673	Electron Tubes, Transmitting
3694	Engine Electrical Equipment

3722	Aircraft Engines and Engine Parts
3741	Locomotive and Parts

Consumer Goods

SIC Industry No.	Industry
2045	Blended and Prepared Flour
2072	Chocolate and Cocoa Products
2271	Woven Carpets and Rugs
2841	Soap and Other Detergents
3011	Tires and Inner Tubes
3021	Rubber Footwear
3632	Household Refrigerators and Freezers
3635	Household Vacuum Cleaners
3641	Electric Lamps
3651	Radio and TV Receiving Sets
3652	Phonograph Records
3672	Cathode Ray Picture Tubes
3692	Primary Batteries, Dry and Wet
3861	Photographic Equipment and Supplies
3996	Hard Surface Floor Coverings

Manufacturing Industries in Which Opportunities are Changing

As stated earlier, only 31 of the 113 manufacturing industries with low concentration ratios had net increases in the number of firms between 1958 and 1971. These 31 industries appear to provide the best opportunities for small firms. The remaining 82 industries with low concentration levels appear to be undergoing changes in several areas, such as in market structure, in size distribution of firms within the industry and in concentration levels. These changing structural patterns are identified by almost continuous decline in the number of small firms in most of these remaining low concentrated industries between 1958 and 1967. The declines in small firms varied in time periods and in magnitudes. The 82

industries with low concentrations can be classified into three major groups: (1) industries with declines in the number of small firms between 1958 and 1971; (2) industries with increases in the number of small firms between 1958 and 1967 and declines between 1967 and 1971; (3) industries with declines in the number of small firms between 1958 and 1967 and increases between 1967 and 1971.

In the first group are 54 industries with consistent declines in the number of small firms during the two periods, 1958-67 and 1967-71. The declines for most of the 54 industries were quite large, either on a percentage basis or in absolute terms. Between 1958 and 1967 the percentage declines ranged from 10 percent to 42 percent for these industries. On an absolute basis, the declines in the number of small firms for 48 of the 54 industries were substantial, ranging from 100 to 5,354 small firms during the period 1958-67. These same patterns of decline continued throughout the period of 1967-71. The 54 industries with low concentration ratios and with declines in the number of small firms between 1958 and 1971 are listed as follows:

Manufacturing Industries With
Changing Opportunities

(Industries with Low Concentration Ratios and Declines in the Number of Small Firms Between 1958 and 1971)

Producer Goods

SIC Industry No.	Industry
2041	Flour and Other Grain Mill Products
2042	Prepared Feeds for Animals and Fowls
2293	Padding and Upholstery Filling
2294	Processed Textile Wastes
2393	Textile Bags
2395	Pleating and Stitching
2421	Sawmills and Planing Mills, General
2443	Veneer and Plywood Containers

2541	Wood Partitions and Fixtures
2751	Commercial Printing, except Lithographic
2851	Paints and Allied Products
3271	Concrete Block and Brick
3272	Concrete Products, NEC
3321	Grey Iron Foundries
3444	Sheet Metalwork
3497	Metal Foil and Leaf
3565	Industrial Patterns
3629	Electrical Industrial Apparatus, NEC
3642	Lighting Fixtures
3729	Aircraft Equipment, NEC
3955	Carbon and Paper and Inked Ribbons

Consumer Goods

SIC Industry No.	Industry
2011	Meatpacking Plants
2013	Sausages and Other Prepared Meats
2024	Ice Cream and Frozen Desserts
2026	Fluid Milk
2033	Canned Fruits and Vegetables
2035	Pickles, Sauces, and Salad Dressing
2051	Bread, Cake, and Related Products
2071	Confectionery Products
2086	Bottled and Canned Soft Drinks
2099	Food Preparations, NEC
2254	Knit Underwear Mills
2292	Lace Goods
2311	Men's and Boys' Suits and Coats
2322	Men's and Boys' Underwear

2327	Men's and Boys' Separate Trousers
2329	Men's and Boys' Clothing, NEC
2331	Women's and Misses' Blouses and Waists
2337	Women's and Misses' Suits and Coats
2341	Women's and Children's Underwear
2371	Fur Goods
2392	House Furnishings, NEC
2399	Fabricated Textile Products, NEC
2512	Upholstered Household Furniture
2515	Mattresses and Bedsprings
2591	Venetian Blinds and Shades
2834	Pharmaceutical Preparations
2844	Toilet Preparations
3151	Leather Gloves and Mittens
3269	Pottery Products, NEC
3732	Boat Building and Repairing
3941	Games and Toys
3961	Costume Jewelry
3991	Brooms and Brushes

The second group which contains 20 industries with low concentration ratios had increases in small firms between 1958 and 1967, and declines between 1967 and 1971. Most of the declines between 1967 and 1971 were substantial, and eight had declines that more than offset the increases in small firms that occurred in the previous period of 1958-67. Following is the list of 20 industries with low concentration levels that experienced increases in the number of small firms between 1958 and 1971, but declines between 1967 and 1971:

Manufacturing Industries With Changing Opportunities

(Industries with Low Concentration Ratios and Increases in the Number of Small Firms Between 1958 and 1967 but with Declines Between 1967 and 1971)

Producer Goods

SIC Industry No.	Industry
2295	Coated Fabric, Not Rubberized
2411	Logging Camp and Logging Contractors
2431	Millwork
2818	Industrial Organic Chemicals, NEC
3273	Ready-Mixed Concrete
3361	Aluminum Castings
3369	Nonferrous Castings, NEC
3442	Metal Doors, Sash and Trim
3446	Architectural Metalwork
3451	Screw Machine Products
3471	Plating and Polishing
3479	Metal Coating and Allied Services
3481	Miscellaneous Fabricated Wire Products
3493	Steel Springs
3499	Fabricated Metal Products, NEC

Consumer Goods

SIC Industry No.	Industry
2094	Animal and Marine Fats and Oils
2253	Knit Outerwear Mills
2511	Wood Household Furniture
2741	Miscellaneous Publishing
3297	Nonclay Refactories

In the third group, eight industries with low concentration levels had declines in the number of small firms between 1958 and 1967 and increases between 1967 and 1971. Most of the increases in the latter years were not very large with six of the industries having increases that were not sufficient to offset the declines in the earlier years, thus, having a net decline between 1958 and 1971. These eight industries are listed as follows:

Manufacturing Industries With
Changing Opportunities

(Industries with Low Concentration Ratios and Declines in the Number of Small Firms Between 1958 and 1967 but with Increases Between 1967 and 1971)

Producer Goods

SIC Industry No.	Industry
2083	Malt
2992	Lubricating Oils and Greases
3069	Fabricated Rubber Products, NEC

Consumer Goods

SIC Industry No.	Industry
2034	Dehydrated Food Products
2082	Malt Liquors
2251	Women's Hosiery, except Socks
2519	Household Furniture, NEC
2339	Women's and Misses' Outerwear, NEC

The three groups of industries with changing opportunities are classified as producer goods and consumer goods. The 82 industries in the combined groups are almost evenly divided between the producer (39) and consumer goods (43) industries. However, the 43 consumer goods represented 31 percent of the total number of all consumer goods industries in manufacturing, while the 39 producer goods industries accounted for only 15 percent of all producer

goods industries in manufacturing. With a higher proportion of industries in consumer goods industries experiencing declines in the number of small firms, it appears that the opportunities available to small firms are declining more rapidly in consumer goods than in producer goods industries.

The 82 industries with low concentration ratios represent a fairly wide cross section of industries. However, there is a definite clustering of industries on a broad two-digit SIC basis, including such product lines as food (SIC 20), apparel (SIC 23) plus textile mill products (SIC 22), fabricated metals (SIC 34), and wood household furniture (SIC 25). Food and apparel (including textile mill products) are represented by 16 industries each, and fabricated metal products and wood household furniture are represented by 10 industries each. Textile mill products and fabricated metals together accounted for 14 of the industries and are producer goods; the remaining 38 industries of food, apparel, and wood household furniture are all in the consumer goods industries. These consumer goods industries in particular, which historically have had low concentration levels, low entry requirements and large numbers of small firms, are now all experiencing significant declines in small firms.

The net reduction in the number of small firms in the 82 manufacturing industries does not necessarily mean that no new firms are entering these industries. The data show only the net declines and net increases between two periods of time. The number of small firms entering and leaving the industry each year is not available. However, the information does show that in those industries with net declines, the number of small firms leaving the industry exceeded those that entered during the years covered by this study. It also indicates that in the long run, entry and survival in such industries will become more difficult.

The decline in the number of small firms also indicates that many of the small firms remaining in the various industries may be growing larger in size. This is reflected in the findings of the earlier study on "Small Firms in the Manufacturing Industries." In many of the industries the number of firms with 250 to 500 employees increased in number between 1958 and 1967. Many of the firms in this size category undoubtedly were firms that

formerly had less than 250 employees.

The persistent and almost continuous declines in the number of small firms and the changing structural patterns in the 82 low concentrated industries and, particularly in the consumer goods industries, between 1958 and 1971 are due to several factors. Among the more important ones are:

(1) High costs for nationwide advertising of consumer goods;

(2) Changing market patterns resulting from redistribution of population and changing buying habits of consumers;

(3) Increased capital outlays for new equipment or modernization of plant because of (a) technological improvements and innovations, and (b) the requirements of health and safety, anti-pollution and consumer-protection laws;

(4) Changes in economies of scale as the demand for goods is increased; and

(5) The acceleration of mergers and acquisitions during the 1960's.

To what extent in the long run each of these factors has specifically affected and will continue to affect each of the low concentrated industries experiencing declines in the number of small firms is not identifiable from a statistical analysis. Neither is it possible to determine the extent to which entry barriers have been raised to restrict the entry of small firms. To what extent small firms have increased in size to absorb the output of those small firms that have left the industry is also not known. In addition, it is not possible to ascertain whether the declines of small firms for the 82 industries is a short-run phenomenon or a long-run trend. Further detailed study is needed to resolve these and other pertinent questions to determine how and to what extent small firms in the low concentrated manufacturing industries are seriously threatened, and especially to determine what remedies may be proposed to assist small firms in those industries where opportunities are disappearing.

Footnotes

[1]County Business Patterns reports are a statistical by-product derived from employment and payroll information. The data came from Social Security Records in which all establishments with one or more employees are required to participate.

Although the Census data are on a company basis and the County Business Patterns data are on an establishment basis, the data are somewhat comparable when using the size category of 250 or less employees. Most small firms with less than 250 employees have only one establishment and also most establishments with less than 250 employees are independent single establishment small firms. Although large firms have some establishments under 250 employees, the number is not significantly great enough to distort the overall totals of the 250 or less employee categories. Thus, a reasonably accurate and reliable determination and comparison can be made on trends and changes in the number of small firms between 1958 and 1967, and between 1967 and 1971.

[2]"Small Firms In The Manufacturing Industries," SBA Economic Review, Annual Issue 1972, Pages 162-175. This study analyzed and compared divergent trends and changes in the number of small firms in manufacturing between consumer goods and producer goods industries in the years 1958 and 1967. The levels of concentration and changes in concentration were analyzed for each industry.

[3]Small firms were defined as having 250 or less employees.

APPENDIX A. MANUFACTURING INDUSTRIES WITH FAVORABLE OPPORTUNITIES FOR SMALL FIRMS

PART 1 - Industries With Low Concentration Ratios and Increases in Small Establishments Between 1958 and 1967

SIC Industry No.	Industry	Number of Firms					Concentration Ratio		
		Total		Small Firms[1]		Net Increase	Percent of Market Share of 4 Largest Firms		Percentage Change
		1958	1967	1958	1967	1958/1967	1958	1967	1958/1967
	Producer Goods								
2433	PREFABRICATED WOOD STRUCTURES	364	514	349	493	+ 144	28	21	- 7
2499	WOOD PRODUCTS, NEC	2,612	3,042	2,558	2,954	+ 396	14	15	+ 1
2641	PAPER COATINGS AND GLAZING	291	331	240	261	+ 21	30(1963)	38	+ 8
2752	COMMERCIAL PRINTING, LITHOGRAPHIC	3,696	6,719	3,613	6,535	+ 2,922	6	5	- 1
2753	ENGRAVING AND PLATE PRINTING	520	570	512	551	+ 39	28	21	- 7
2789	BOOK BINDING AND RELATED WORK	966	1,009	950	976	+ 26	10	11	- 1
2791	TYPESETTING	1,181	1,519	1,174	1,490	+ 316	6	7	+ 1
2819	INDUSTRIAL INORGANIC CHEMICALS, NEC	344	409	266	286	+ 20	34	27	- 7
2821	PLASTIC MATERIALS AND RESINS	279	508	223	398	+ 175	40	27	-13
2899	CHEMICAL PREPARATIONS, NEC	1,232	1,280	1,181	1,183	+ 2	20(1963)	19	- 1
3079	MISCELLANEOUS PLASTIC PRODUCTS	3,093	4,485	2,931	4,070	+ 1,139	8	8	0
3441	FABRICATED STRUCTURAL STEEL	1,787	1,868	1,705	1,747	+ 42	15(1963)	13	- 2
3443	FABRICATED PLATE WORK (BOILER SHOPS)	1,180	1,343	1,109	1,228	+ 119	25(1963)	30	+ 5
3498	FABRICATED PIPE AND FITTINGS	273	356	251	313	+ 62	24	17	- 7
3536	HOISTS, CRANES AND MONORAILS	78	140	65	112	+ 47	36(1963)	44	+ 8
3544	SPECIAL DIES, TOOLS, JIGS AND FIXTURES	5,715	6,532	5,658	6,425	+ 767	6(1963)	4	- 2
3545	MACHINE TOOL ACCESSORIES	865	1,072	819	1,002	+ 183	17(1963)	20	+ 3
3567	INDUSTRIAL FURNACES AND OVENS	197	243	179	217	+ 38	28(1963)	36	+ 8
3599	MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL	10,098	15,056	10,018	14,921	+ 4,903	8	7	- 1
3662	RADIO AND TV COMMUNICATION EQUIPMENT	472	1,099	379	883	+ 504	29(1963)	22	- 7
3679	ELECTRONIC COMPONENTS, NEC	1,348	1,769	1,210	1,493	+ 288	13(1963)	32	+ 9
3841	SURGICAL AND MEDICAL INSTRUMENTS	223	298	209	261	+ 52	47(1963)	38	- 9
3913	LAPIDARY WORK	249	296	244	293	+ 49	16	30	+14
	Consumer Goods								
2036	FRESH OR FROZEN PACKAGED FISH	429	461	415	436	+ 21	18	26	+ 8
2335	WOMEN'S AND MISSES' DRESSES	4,577	5,007	4,497	4,914	+ 417	6	7	+ 1
2391	CURTAINS AND DRAPERIES	759	1,392	749	1,375	+ 626	26	27	+ 1
3791	TRAILER COACHES	363	705	353	662	+ 309	22	19	- 3
3842	SURGICAL APPLIANCES AND SUPPLIES	553	754	526	698	+ 172	49(1963)	44	- 5
3911	JEWELRY, PRECIOUS METAL	1,300	1,477	1,286	1,457	+ 171	18	23	+ 5
3931	MUSICAL INSTRUMENTS AND PARTS	253	304	235	280	+ 45	38	35	- 3
3949	SPORTING AND ATHLETIC GOODS, NEC	1,169	1,303	1,147	1,244	+ 97	41	28	-13

[1] Less than 250 employees

Source: Special industry tabulations on size of company in manufacturing, 1958, 1963 and 1967 prepared by the Bureau of the Census for the Small Business Administration and the Bureau of the Census publication, Concentration Ratios in Manufacturing, Part I, 1967.

PART 2 - Industries With Low Concentration Ratios and Increases in Small Establishments Between 1967 and 1971

SIC Industry No.	Industry	Number of Establishments				
		Total		Small Establishments[1]		
		1967	1971	1967	1971	% Change 1967-1971
		Producer Goods				
2432	PREFABRICATED WOOD STRUCTURES	466	653	442	640	+44.8
2499	WOOD PRODUCTS, NEC	2,836	3,000	2,826	2,978	+5.4
2641	PAPER COATINGS AND GLAZING	373	411	336	379	+12.8
2752	COMMERCIAL PRINTING, LITHOGRAPHIC	6,441	6,824	6,386	6,749	+5.7
2753	ENGRAVING AND PLATE PRINTING	508	515	439	442	+0.7
2789	BOOK BINDING AND RELATED WORK	985	1,008	946	988	+4.4
2791	TYPESETTING	1,396	1,568	1,396	1,563	+12.0
2819	INDUSTRIAL INORGANIC CHEMICALS, NEC	716	730	696	699	+0.4
2821	PLASTIC MATERIALS AND RESINS	647	759	599	692	+15.5
2899	CHEMICAL PREPARATIONS, NEC	1,226	1,255	1,213	1,234	+1.7
3089	MISCELLANEOUS PLASTIC PRODUCTS	4,276	5,486	4,206	5,310	+26.3
3441	FABRICATED STRUCTURAL STEEL	1,793	1,934	1,698	1,866	+9.9
3443	FABRICATED PLATEWORK (BOILER SHOPS)	1,359	1,447	1,309	1,377	+5.2
3498	FABRICATED PIPE AND FITTINGS	344	1,095	337	364	+8.0
3536	HOISTS, CRANES AND MONORAILS	116	145	114	123	+7.9
3544	SPECIAL DIES, TOOLS, JIGS AND FIXTURES	6,236	6,859	6,203	6,476	+4.4
3545	MACHINE TOOL ACCESSORIES	1,073	1,118	1,067	1,096	+2.7
3567	INDUSTRIAL FURNACES AND OVENS	281	287	264	274	+3.8
3599	MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL	14,093	14,609	14,039	14,552	+3.7
3662	RADIO AND TV COMMUNICATION EQUIPMENT	1,138	1,391	995	1,187	+19.3
3679	ELECTRONIC COMPONENTS, NEC	1,913	2,190	1,661	2,004	+20.7
3841	SURGICAL AND MEDICAL INSTRUMENTS	285	394	206	361	+75.2
3843	DENTARY WORK	267	291	267	291	+9.0
		Consumer Goods				
2036	FRESH OR FROZEN PACKAGED FISH	426	456	409	443	+8.3
2385	WATERPROOFING AND RUBBERIZED FABRICS	4,235	4,567	4,168	4,493	+7.8
2501	HATS, CAPS AND MILLINERY	1,292	1,331	1,281	1,318	+2.9
3791	TRAILER COACHES	803	1,394	738	1,354	+83.5
3842	SURGICAL APPLIANCES AND SUPPLIES	739	756	704	722	+2.6
3911	JEWELRY, PRECIOUS METAL	1,398	1,375	1,339	1,356	+1.3
3931	MUSICAL INSTRUMENTS AND PARTS	324	338	293	316	+7.8
3949	SPORTING AND ATHLETIC GOODS, NEC	1,246	1,268	1,202	1,228	+2.2

[1] Less than 250 employees

Source: Bureau of the Census, County Business Patterns, United States Summary, 1967 and 1971.

APPENDIX B. SUMMARY AND OUTLOOK FOR 23 MANUFACTURING INDUSTRIES WITH OPPORTUNITIES FOR SMALL FIRMS*

By William R. Etheridge

Following is a brief summary of the outlook and trends for 23 of the 31 industries which appear to offer the best opportunities for small firms. Information on the remaining eight industries was not readily available from regularly published sources at the time this report was prepared. These industry summaries include a brief description of the current situation in each industry, prospects for the future and estimated projections on total industry sales or output. Most of this information comes from the publication, U. S. Industrial Outlook for 1971 and 1972, U. S. Department of Commerce, Bureau of Domestic Commerce. Other sources include Predicasts, 1972, and Standard and Poor's Industry Surveys 1971 - 1972.

2036-Fresh or Frozen Packaged Fish

Dollar sales of frozen fish are estimated to advance 32 percent during the period 1970-80.

Retail sales of frozen fish and seafood will rise 48 percent to $2 billion from 1970 to 1975; in addition, quick-service restaurants will help to boost fish consumption. In 1971 fresh and frozen fish consumption was down 0.4 pounds per capita, probably a result of price advances and publicity on fish contamination. The rise in prices is due to the interaction of strong demand with (a) tight domestic supply, (b) dock strikes and (c) international currency adjustments which have reduced imports. Demand for fish is expected to remain strong through 1972, indicating a further jump in wholesale and retail prices during the year.

2335-Women's and Misses' Dresses

No demand or shipments forecasts (for 1972, 1975, or 1980) have been made by the Department of Commerce because of the many possible assumptions as to foreign-made fiber and finished product quotas, uncertain bilateral trade agreement prospects, etc.

Women's and misses' dresses value of shipments failed to increase in 1971 over 1970 — zero growth — and had declined 8 percent from 1969 to 1970.

Employment in the women's and misses' outerwear industry's 8,694 establishments averaged 49.

Characteristics of the women's outerwear industry:

1. Compared to other manufacturing, little capital is required for entry into the women's outerwear industry.

2. Vigorous price and quality competition.

3. Historically high failure rate.

2433-Prefabricated Wood Structures

Industrialized or factory-built housing has been growing rapidly in the aggregate. Problems of coordinating factory output to on-site demand, lack of control of the whole housing process, and shortage of skilled management have led to cost control problems in the industry. The total number of companies producing modulars mushroomed from 196 to about 275 during 1971. But of the 196 companies in business at the end of 1970, only 146 were in business a year later.

Total modular production in 1971 was almost double that for 1970.

Mobile home producers manufactured 23 percent of the 1971 output.

By early 1972, annual production capacity had risen to about 200,000, compared to the 1971 actual production of 52,160 units.

Sales of prefabricated wooden buildings are predicted to climb 20 percent between 1971 and 1975.

2499-Wood Products, NEC

The market for forest products improved significantly

in 1971, due largely to increased residential and commercial construction.

Research and development of new products, technical improvement in processing, and new marketing approaches characterized the wood products industries in 1971.

Wood products industries are expected to increase production throughout the 1970's.

Particle board (24993) showed especially heavy increases in 1971 and 1972, with increases projected for the period 1971-80.

2752-Commercial Printing, Lithographic

Graphic arts employment fell by 20,000 in 1971, but employment started to rise late in 1971 and is expected to rise in 1972.

Shipments have a good upward trend and are expected to increase 8.5 percent from 1971 to 1975 and 8.2 percent from 1971 to 1980, after gains of 8 percent in 1971 and 10 percent in 1972, rising faster than the rest of the printing and publishing industry except for manifold business forms. The industry is geographically decentralized, with over 19,000 individual printing plants, of which 80 percent have less than 20 employees.

The advance of new technology in the graphic arts industry has added new competitive challenges — in lithographic, letterpress, gravure and screen.

Though there has been growth in imported printed products, over 80 percent of total imports are noncompetitive with United States printed products.

Because of the small size of the average printer, research and development on air pollution control and printing technology has been done mostly by the graphic arts suppliers.

The industry needs more sophisticated management to meet increasing competition and plan for new technologies.

2789-Bookbinding and Related Work

Sales of related media (filmstrips, films, transparencies, recordings, cassettes) are growing faster than sales of textbooks and tests.

Educational book sales have been spurred by educational emphasis on ethnic-group identity, ecology, consumerism, and a broadened definition of vocational education.

Rapid growth of community colleges and concomitant new patterns of higher education make a need for new learning materials, despite the leveling-off of enrollments.

The uptrend in adult education requires more instructional material.

Though educational publishing sales will likely rise little in 1972, growth should average 5 — 6 percent per year to 1980. However, the product mix is expected to change toward audio-visual media, including instructional magazines, and away from textbooks and workbooks.

To do well, educational publishers must develop competitive pricing and marketing strategies that will ensure continuing profitability in the fast-changing world of educational publishing. "Trade book" sales, particularly of reference books to homes and offices, have been weak the past two years. Also, inflation and cutbacks in Federal programs have dampened trade book sales to libraries.

2791-Typesetting (see also 2752)

Shipments increased 6 percent in 1971, 8 percent in 1972, with projected increases of 8 percent for both 1971-75 and 1971-80. This is considered favorable growth.

Most "typehouses" are concentrated in major printing centers — New York, Chicago, Los Angeles, Philadelphia. This industry had had more technological changes than most segments of graphic arts.

More and more printing is being done by lithography, with a decline in the letterpress process.

Neither imports nor exports have been much of a factor in the typesetting industry.

Favorable prognosis for the future: a good demand from the graphic arts industries is expected.

2819-Industrial Inorganic Chemicals, NEC

Shipments slumped 3 percent in 1971 but are expected to rise 5 percent in 1972. Since 1966, growth of industry shipments has been below that of many manufacturing industries. Also, earnings are 20 percent below 1966.

Shipments are expected to be up by a 4.6 percent annual rate during the period 1971-75 and 4.7 percent during 1971-80.

Capacity utilization is well under 80 percent. Marginal, obsolete plants are being closed.

The upturn expected in 1972 is tied to housing, autos, pulp and paper, rubber, plastics and fertilizers.

Though there has been much less capital spending in recent years, much of the 1971-74 spending will be for anti-pollution and cost reduction/modernization.

Neither imports nor exports are important percentagewise. Large growth imports are alumina, iodine, ammonia, and ammonium nitrate and sulfate, but growth of other imports will slow.

2821-Plastic Materials and Resins

Value of shipments increased 4 percent in 1971 and is expected to be up 9 percent in 1972. The 1971-75 annual growth rate is estimated at 8.9 percent; 9.0 percent for 1971-80. Physical volume is expected to rise 7 percent in 1972. However, until more refineries are built, the current serious shortage of benzene will curtail the output of

certain plastics, notably styrene.

Though long-term industry growth rates are outstanding, year-to-year growth is unsteady — shipment value grew 11 percent in 1969 but only 2 percent in 1970.

About 10 percent of sales is spent on R & D.

Because of the diversity of the market, demand is not seriously affected by changes in defense spending or a shifting population mix. Supply, however, can be affected by the price and supply of crude petroleum.

Because of solid waste disposal problems, recycling of plastics may slow initial production rates after 1980. Housing and mobile homes will continue to give impetus to the use of plastics in construction, notably in wood replacement. Plastics use in autos is high and may increase.

Irregular cycles between overcapacity and tight supply have characterized commodity resins.

Productivity is rising because of economies of scale. Imports have risen rapidly in recent years and are now over 3 percent of the U. S. market. Imports will probably continue to increase.

Typically, basic resins are produced by large, integrated chemical manufacturers and then mixed into different formulations by smaller compounders.

3079-Miscellaneous Plastics Products

Growth trend is: 1971, 6 percent; 1972, 9 percent; 1971-75, 9.7 percent; 1971-80, 7.8 percent. A high growth rate is expected, largely due to increased auto sales.

The industry is dominated by a relatively small group of multiproduct, highly diversified corporations.

Many medium-size companies have recently merged with firms outside the industry.

Industry financial data are suspect because

corporate figures include operations in such industries as chemicals, retailing and metal products as well as foreign operations. Profit ratios, though improved, are still below general manufacturing ratios.

3441-Fabricated Structural Steel

Value of shipments increased 10 percent in 1971 and is expected to increase about the same percentage in 1972.

Virtually all the 1971 increase was from higher prices, but the 1972 gain is expected to show a volume increase. Demand from office building and plant construction was weak in 1971 but is expected to improve considerably in future years.

Value of imports has doubled between 1967 and 1971, though import volume is still small.

Value of shipments should rise from $3.9 billion in 1972 to $4.6 billion (+ 18 percent) in 1975 and to $6.2 billion (+ 59 percent) in 1980, with annual growth rates averaging between 6 percent and 7 percent.

3443-Fabricated Platework (Boiler Shops)

Shipments of steel plates slacked off about 17 percent from 1965 to 1970, in a general downtrend. It is anticipated that shipments will grow 25 percent during the period 1972-1975 and 19 percent from 1975 to 1980. However, shipments declined 5 percent in 1971 and will probably be off another 9 percent in 1972.

Steel plate is used to a considerable extent in the construction industry and, therefore, has had strong demand in recent years, particularly in residential construction.

Imports of steel plates soared more than 130 percent from 1965 to 1968 but plummeted 46 percent from 1968 to 1970. Imports of power boilers were negligible until 1970 when they more than tripled from 1969 reaching $11 million. In 1971, imports again increased about 50 percent. Main users are electric utilities and industries using process steam.

3536-Hoists, Cranes and Monorails

Shipments of hoists, cranes and monorails are expected to rise 9 percent after a decline of 8 percent in 1971. The investment tax credit and improved business conditions are responsible for this upturn. In 1971 shipments were slightly below 1967 shipments.

Factory employment in the hoists, cranes and monorail group dropped almost 50 percent in 1971 but in 1972 may climb back near the 1970 high.

Exports of hoists, cranes and monorail equipment rose 96 percent in 1971 over 1970.

Exports for 1972 are predicted to be down 27 percent from 1971, though still 44 percent above 1970.

Imports climbed about 10 percent from 1970 to 1971, with a further rise of 11 percent forecast for 1972.

The investment tax credit and new applications of this equipment to materials handling are primarily responsible for the improvement forecast for 1972.

3544-Special Dies, Tools, Jigs and Fixtures

After a 7 percent slump in 1971, total shipments are expected to rebound in 1972 to 20 percent above 1971, but this gain probably will not hold to 1975.

Tool and die shipments are expected to increase an average of 1.1 percent per year from 1971 to 1975 and 3.3 percent per year from 1971 to 1980. Differences in 1971 activity among various segments of the industry were wide. Conventional machining services with standard tools declined in favor of facilities equipped with numerically controlled and fully automated equipment. However, special and custom machines improved 15 percent or more in 1971 over 1970.

Geographic location of customer industries influenced tool and die profits. The greatest sales decline in 1971 was in the Detroit area.

3545-Machine Tool Accessories

The industry had a slight upturn in demand in the last few months of 1971, and a greater upturn is forecast for 1972 in sales of all metalcutting tools—up to 16 percent above 1971. Shipments in 1971 were 13 percent below 1970.

The volume of 1972 high-speed tool shipments in 1972 is expected to increase 10-12 percent over 1971. The value of shipments is expected to rise from 20 to 25 percent, largely from higher prices. The volume of carbide tool shipments will probably rise 8 percent to 10 percent, but the value of those shipments is expected to increase only 7 percent to 9 percent.

In 1971 exports of cutting tools dropped only 8 percent, while domestic consumption dropped 13 percent. For the first time in 10 years, imports declined (21 percent) because of low demand and strong price competition from U. S. tools.

Long-range industry prospects are very favorable - product shipments are expected to rise at average annual rates of 13.8 percent to 1975 and 12.4 percent to 1980.

3662-Radio and TV Communication Equipment

Shipments dropped 11 percent in 1971 but are expected to rise 5 percent in 1972. From 1971 to 1975, industry shipments should rise 4 percent a year and from 1971 to 1980, 4.3 percent yearly.

Use of integrated circuits is steadily increasing, with emphasis on microminiaturization.

Audio-visual communications will be increasingly important by 1980, as will educational television for instructional purposes.

Satellite communications will be used by ships and planes.

3679-Electronic Components, NEC

Shipments were off 3 percent from 1970 to 1971 but

are expected to rise 4 percent in 1972.

Sparked by the growth of transistors and solid-state electronics, the value of shipments in the electronics components industry should grow at an average annual rate of 2.3 percent to 1980.

The electronic components industry must look to industrial and commercial sectors for future growth, in view of (1) defense cutbacks and (2) rising imports of finished products and components and falling exports of each, notably TV sets.

Technological developments in this industry require extensive R & D, and usually only larger firms have the capability.

Except for semiconductors and integrated circuits (SIC 3674), productivity in the electronic components industry will likely decline because of rising wages and reduced output.

The overseas investment picture is complicated by monetary agreements, uncertainty as to Customs' definition of fabricated parts and effects of Phase II of the Wage and Price Controls.

3791-Trailer Coaches

Mobile home shipments declined 2.8 percent in 1970 but advanced 22 percent in 1971 and are predicted to rise 4.1 percent for 1972. Causes of the 1971 spurt were increased housing demand, liberalized financing programs and escalating costs of conventional houses. Constraints on further growth of mobile home production may be zoning, the degree of success in continuing development of mobile home parks and the competition from section and modular housing.

The continuing trend to larger units will reduce the mobility of mobile homes.

The most propitious areas for mobile home location have been the West, the South and rural areas generally. As a result of acquisitions, merger and new entrants, mobile

homes will be produced by firms in the housing manufacturing industry that are more completely integrated in operations.

3841-Surgical and Medical Instruments

Shipments should increase 16 percent in 1972, the same as in 1971. The growth rate in shipments was only 4.3 percent annually, from 1967-71. Annual growth rates for 1971-75 are predicted at 15.8 percent, and the same rates hold for 1971-80.

Advances in medical technology and patient care have expanded markets for surgical and medical instruments. Examples are laser beam instruments and electronic thermometers.

Seventy-four percent of the plants making surgical and medical instruments have 49 or fewer employees. Imports are not yet a serious problem - exports of medical and dental instruments and supplies (in general) exceed imports by about 6 to 1.

3842-Surgical Appliances and Supplies

Shipments are expected to increase 9 percent in 1972, after another 9 percent rise in 1971. The growth rate in shipments during 1967-71 was 14.7 percent annually. The projected annual growth rate for the period 1971-80 is 9.2 percent.

Advances in medical technology and patient care have expanded markets for surgical appliances and supplies. Disposables are being used more and more in hospitals.

A large majority of the plants producing surgical appliances and supplies are small (employing few people), 83 percent having less than 50 employees.

Imports are evidently not now increasing and amount to about one-sixth of exports.

3911-Jewelry, Precious Metal

Steady growth is expected through 1980, at an annual rate of 3.8 percent for 1971-75 and 4 percent for 1975-80.

The rate for 1967-71 was 4.4 percent.

Current fashion in young men's and women's clothes calls for restrained effects in precious jewelry and gemstones, as contrasted with costume jewelry.

Total jewelry imports went up 13 percent in 1971 over 1970. Imports are about 5 percent of domestic consumption.

Total jewelry imports are expected to climb another 19 percent in 1972. In 1971, precious metal jewelry imports continued up to $33 million, or more than 26 percent over 1970, and exports of previous jewelry declined 19 percent to $34 million, a trend which is expected to continue —imports will for the first time exceed exports.

3931-Musical Instruments

Sales of musical instruments are forecast to be 6.5 percent higher in 1972 than in 1971.

Purchases of musical instruments, other than electronic, is variously estimated to increase from 4 percent to 10 percent by 1976 over 1972. Shipments of electronic musical instruments are predicted to increase 30 percent from 1971 to 1976.

3949-Sporting and Athletic Goods, NEC

The 5 percent growth in 1971 is expected to continue throughout 1972. Overall sporting goods shipments are expected to average 4.5 percent growth annually for 1971-75 and 4.7 percent for 1971-80.

Imports were up 10 percent in 1971, lower than their average 32 percent per year in 1968-70. Imports in 1971 were up for: skis and snowshoes (14 percent), miscellaneous winter sports equipment (25 percent), tennis equipment (21 percent), and baseballs and softballs (36 percent).

However, 1970 exports also were up 51 percent over 1970, overall. Exports to Japan climbed about 80 percent in 1971 and to Canada about 30 percent.

It is anticipated that increased leisure will not necessarily mean ever-increasing sales of sporting goods. Travel, education and other types of recreation are competing.